# CORRECTIVE ACTION PLAN
## Hot Spot #2015
## 4424 South Irby Street
## Florence, South Carolina
## SCDHEC Site # 17760


Prepared For:

*R.L. Jordan Oil Company*


**R.L. Jordan Oil Company of North Carolina, Inc.**
**P.O. Box 2527**
**Spartanburg, South Carolina 29304**

Prepared By:

**TERRY** *Environmental Services*
CLIENTS FIRST ALWAYS

P.O. Box 25
Summerville, South Carolina
(843) 873-8200
Fax (843) 873-8765
www.terryenvironmental.com

PROJECT # 2230.13

**Travis Darden**
**Project Manager**

**Jason A. Terry, PG**
**President**

**September 2017**

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## 1.0 INTRODUCTION

TERRY Environmental Services, Inc. (TERRY) has been contracted by R.L. Jordan Oil Company of North Carolina, Inc. (RLJOC) to serve as the environmental contractor for the remediation activities at Hot Spot #2015, Florence, South Carolina. The site is located at 4424 South Irby Street in Florence, South Carolina (Appendix A, Figure 1) and is referenced by the South Carolina Department of Health and Environmental Control (SCDHEC) as Site ID# 17760. The site is bordered by commercial, residential, and agricultural properties. To date 39 monitoring wells have been installed in order to delineate the horizontal and vertical extent of contaminant plume. A site map indicating the location of the monitoring wells is provided as Figure 2, Appendix A.

The following represents a brief synopsis and timeline of remedial efforts to date:

- A pneumatic product skimming system was installed by a previous contractor in June of 2000 in a recovery sump near MW-1.
- An air sparge network and compressor was installed at the site by a previous contractor and placed into operation in March 2003.
- November 2007: TERRY becomes the contractor for the site and submits a CAP modification to the Department requesting additional remedial technologies such as AFVR and ISCO be allowed at the subject site.
- AFVR events are utilized when sampling/field data indicate the presence of product in monitoring wells.
- Late 2010/ Early 2011: All infrastructure and the former petrol retail store are removed from the subject site leaving the property vacant.
- November 2011: The Department grants TERRY permission to excavate the former source zone and surrounding area.
- July 2016: a long term AFVR event was conducted. To date no rebound of mobile product has been detected. Dissolved contaminant levels are displayed in Table 1A.

## 2.0 SITE SPECIFIC INFORMATION

To date, assessment efforts have resulted in the installation of 39 monitoring wells at the site. This number of wells was deemed necessary to fully delineate the contaminant plume in the three distinct horizons found in the subsurface at the subject site. The shallow water table consists of silts and clay is typically only 3 to four feet below ground. Furthermore, Potentiometric Maps from previous reports indicate that shallow groundwater flow is generally static, intermediate flow through a sandy stratum at around 25-30 ft bgs is generally to the north, and the deeper groundwater flow within a limestone horizon of varying degrees of lithification is generally to the west in the area proximal to the former source. Underlying strata are composed of sands, silts, clays, and at depth, calcareous horizons (limestone).

## 3.0 GROUNDWATER QUALITY

The most recent groundwater sampling event was performed in July 2017. Groundwater samples were collected for laboratory analysis from 39 of the wells associated with the site. No free product was detected during the July 2017 sampling event. Dissolved phase contamination was present in concentrations exceeding the RBSL in MW-1, -2, -3 and DW-1, -2, -5, -7R & -13. The vast majority of the contaminant mass is relegated to the shallow water table proximal to the former source area, and, more specifically MW-3. Site Specific Target Levels (SSTLs) were modeled/calculated by the Department for contaminants of concern in MW-3 using the property boundary as an arbitrary receptor. The SSTLs as prescribed by the Department are as follows:

**TABLE 2**
**Site Specific Target Levels - SSTLs**
**Hot Spot #2015 Florence, South Carolina**
**SCDHEC Site ID #17760**

| Parameter | Site Specific Target Level (ppb) |
|---|---|
| Benzene | 22 |
| Toluene | 4,728 |
| Ethylbenzene | 3,100 |
| Xylene | 44,286 |
| MTBE | 177 |
| Naphthalene | 111 |
| 1,2 DCA | 22 |
| tert-Amyl Alcohol (TAA) | 1,210 |

## 4.0 CORRECTIVE ACTION TECHNOLOGIES

In order to complete remediation at the subject site, TERRY proposes a series of corrective action technologies. These technologies are to be employed in a phased approach. The proposed remedial approach is:

- Aggressive Fluid and Vapor Recovery (AFVR), if mobile product is detected; and
- Air Sparging

Aggressive Fluid and Vapor Recovery (AFVR) has already been approved for use as a remediation tool at the subject site and may be utilized in the future should mobile hydrocarbons be detected in the monitoring wells associated with the site. This technology removes product, contaminated groundwater and hydrocarbon contaminated soil vapor through a series of recovery wells. The vapor emissions are monitored and released to the atmosphere. The groundwater and product is transported off-site to a SCDHEC approved treatment/disposal facility. The application of AFVR is fast and cost effective in removing product and large amounts of contaminated soil vapor. AFVR is not as effective in remediating dissolved phase hydrocarbon contamination.

### 4.1 Air Sparge System

Air sparging has also been approved by the Department for use at this site (CAP 2007), however, the bulk of that system, installed by a previous contractor, has either been destroyed or rendered useless. TERRY, therefore, requests a permit to install up to six (6) Air Sparge/Injection Wells in the shallow subsurface proximal to the source area. An Air Sparge pilot test will be performed to determine sparging effectiveness and the area influenced. Each well will be constructed of 1-inch schedule 40 PVC. The wells will be installed to a depth of approximately 20 feet below grade with 5 feet of 0.010 slotted well screen. The locations of the proposed shallow wells are shown on Figure 3 in Appendix A. A typical Air Sparge/Injection Well detail is provided as Figure 6 in Appendix A. Initially, one air sparge well will be installed and a pilot test will be conducted. The additional wells will be installed in locations as needed based on the results of the pilot test.

All drill cuttings will be field screened for VOCs with a calibrated PID. Clean soils will be spread on site and contaminated soils will be containerized in 55-gallon drums and transported to a SCDHEC approved facility for disposal. Since all the sparge wells will be located within the area of the dissolved plume, it is anticipated that some of the drill cuttings will be contaminated at levels requiring off-site disposal.

The wells will be installed using hollow-stem auger (HSA) drilling techniques. Upon reaching total depth, the well screen and casing will be inserted into the hollow stem of the augers. A filter pack will then be installed by placing clean, well-sorted, silica sand into the annular spacing between the casing and the inside of the augers. The filter pack will be installed via gravity from total depth to a depth of approximately one (1) foot above the top of the screen. A minimum two (2) foot thick bentonite seal will then be installed above the filter pack and the remaining annular spacing between the casing and the boring will be grouted to ground surface. Each well will then be finished below grade inside a protective vault and connected to the air sparge compressor.

Well construction materials will consist of Schedule 40 PVC casing, well screen, and end caps and airtight, locking well caps (prior to connection to sparge lines). Screen slot size will be 0.010 inches. All well screen and casing material will be free of dyes, inks, and/or glues. Each well will be secured with a keyed alike, corrosion resistant, brass padlock. Each proposed well location is shown on the existing site map in Figure 3, Appendix A.

In order to treat the deeper stratigraphic horizons at the subject site, TERRY requests permission to inject ambient air into some of the existing deeper monitoring wells. DW-5 would be used for a pilot test and, if successful, the remaining deep well network would be utilized. To ensure groundwater measurements and data collected are representative of the geologic formation, TERRY will cease all remedial efforts for a period of time that will allow for the equilibration of the subsurface prior to any future sampling events.

### 4.2 Air Sparging (AS) System Setup

As stated above, up to six (6) injection wells will be installed to initially conduct air sparging in the shallow aquifer and another five (5) existing deeper wells may be needed to treat deeper aquifers. Air Sparging is a method of groundwater treatment whereby clean air is pumped into the aquifer and as it rises through the water column volatile organic compounds move from the dissolved phase into the gaseous phase. The vapors are then emitted to the atmosphere at de minimis concentrations. Air sparging increases the dissolved oxygen concentrations in the groundwater which tends to accelerate aerobic degradation of contaminants. In addition, the introduction of ambient air into the subsurface soil and groundwater will 1) strip hydrocarbons from the groundwater, 2) enhance the biodegradation occurring with natural biological organisms in the soil, and 3) accelerate the removal of hydrocarbons attached to soil particles in the vadose zone. A compressor will be installed and connected to each injection well via ½ inch ID hose rated at 200psi. The air hoses will be housed in a Schedule 40 PVC "chase pipe" that may be installed below grade in trenches. The trenches will then be backfilled using native materials. The compressors(s) will have a buried electrical supply line and will be housed in the existing remediation compound.

### 4.3 Air Sparging System

A listing of the system components follows:

- **Process Equipment**
  - Oil-less air sparging blower(s) complete with necessary valves and fittings
  - Capable of 8 CFM at 40 psi, 115v single phase

- **Duct**
  - Galvanized steel pipe and fittings
  - Flexible rubber airline hose to connect to the wellhead
  - PVC "chase piping"
  - Fitting at well head to connect an air pressure gauge

- **Gauges**
  - Air flow meter (CFM)
  - Air pressure gauge

- **Electrical Supply and Controls**
  - Control package wired and housed as needed and provided complete with main disconnect, timers, circuit breakers

- **Structural**
  - Existing Remediation and Equipment Compound

The duration of sparging will initially be continuous for the first quarter (3 months), and then may be adjusted (12 hours on, 12 hours off, etc.) as determined from the corrective action system results.

## 5.0 PERMITTING

TERRY understands that the following permits and/or exemptions will be required for the proposed Corrective Action Modification:

**SCDHEC BAQC Air Permit Exemption** - It is our understanding that the SCDHEC Bureau of Air Quality Control no longer requires air emissions calculations modeling and a permit exemption for remediation projects at underground storage tank sites. As the tanks at the subject site were aboveground and have since been removed, TERRY has included this information for review in Appendix C. TERRY will monitor the emissions of volatile organic vapors during the AFVR events. Estimates of mass removed will be used to monitor the long-term effectiveness of the technology.

**Underground Injection Control Permit (Modification)** - TERRY understands that the SCDHEC has previously issued an UIC permit for this site for the injection of unfiltered atmospheric air (UIC Permit No. 570).

Twelve additional injection wells are proposed (the existing network appears destroyed), TERRY requests the renewal of UIC Permit and anticipates that a Permit to Construct is required (see below).

**Well Installation Permit** – A well installation permit will be required for the installation of up to six (6) sparge wells. All drilling activities will be performed under the direct supervision of a South Carolina certified well driller and in accordance with South Carolina Water Well Regulations R.61-71.

**Waste Disposal, Treatment and/or Recycling** - Petroleum contaminated soil and groundwater will be generated during the installation of the recovery and monitoring wells and during the AFVR events. TERRY anticipates generating less than 5,000 gallons of petroleum contaminated groundwater per month; therefore, a Pump and Haul Permit will not be required from the SCDHEC Bureau of Water. Off-site disposal of petroleum contaminated water and soil will be

required. All waste generated during this project will be transported under the appropriate SCDOT regulations and disposed at SCDHEC permitted facilities.

## 6.0 CORRECTIVE ACTION MONITORING PLAN

Groundwater monitoring will be performed at the site on a quarterly basis for at least the first year. TERRY may request to adjust the sampling frequency and other protocols after the first year pending the progress of the remediation project.

During each monitoring event, depth-to-water and free product thickness (if applicable) will be measured for each monitoring well and point of compliance as appropriate. Elevations will be generated from the depth-to-water measurements by subtracting the depth-to-water from the top of casing elevation. These elevations will be used to generate a water table surface map for the site. Groundwater samples will be collected from the monitoring wells and used to evaluate the progress of the remediation project. Samples will be analyzed for BTEX, Naphthalene, MTBE, and Oxygenates by US EPA Method 8260B at a SCDHEC certified laboratory.

## 7.0 SCHEDULE

A Groundwater Monitoring Report was submitted in July 2017 prior to the implementation of this Corrective Action Plan. The aforementioned monitoring report and the SSTLs mandated in a directive dated April 06, 2017 will serve as the baseline for analysis of the effectiveness of the remedial technology and progress of the remediation project in general.

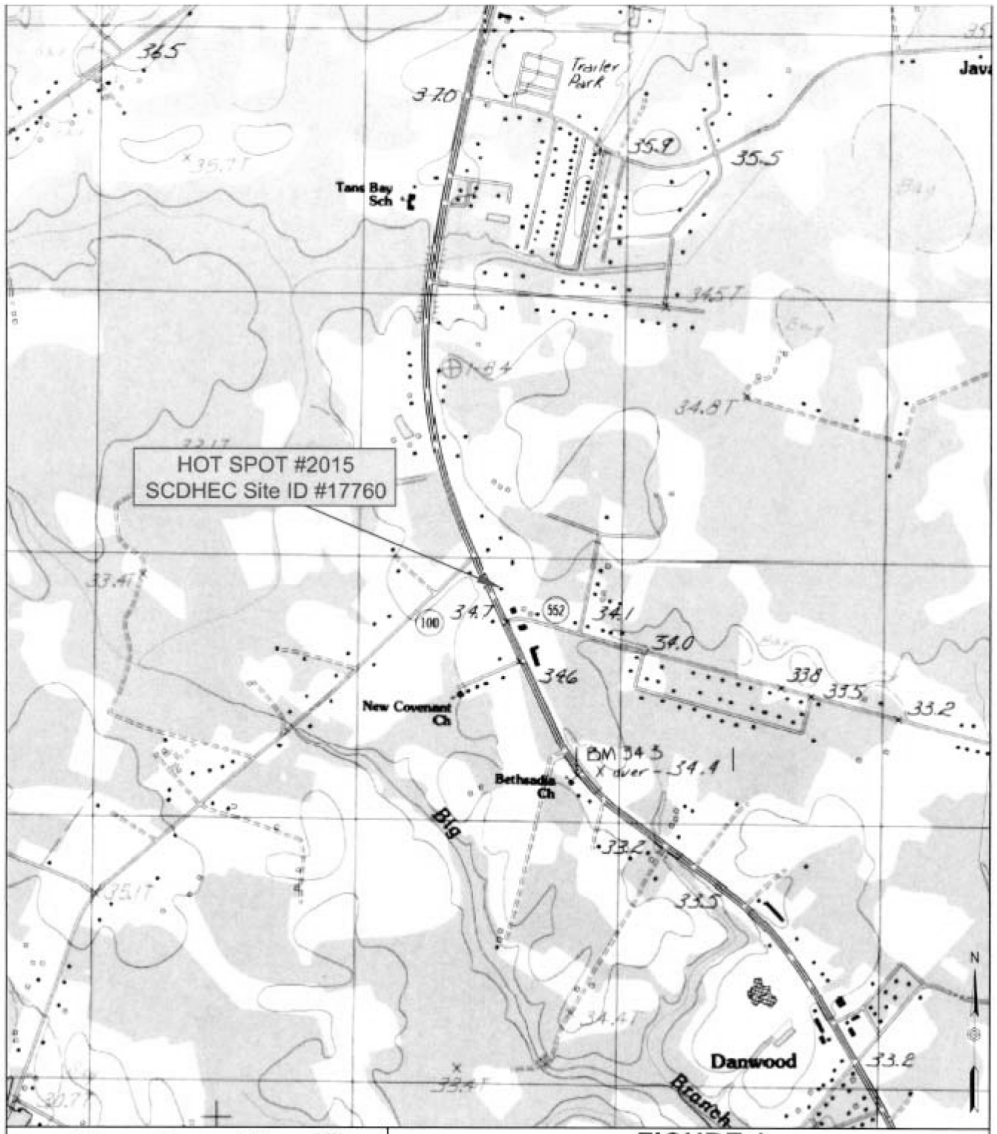
Upon approval of this CAP and upon receipt of all applicable permits, the remedial activities will be implemented as follows:

| | |
|---|---|
| • CAP Approval and Receipt of Permits | Week 1 |
| • Corrective Action Implementation (Well Installation and AFVR) | Week 3 |
| • First Corrective Action System Evaluation | Week 12 |
| • Evaluation of need for additional active AFVR events | Week 23 |
| • Second Corrective Action System Evaluation | Week 24 |
| • Third Corrective Action System Evaluation | Week 36 |
| • Implementation of Additional Activities (if necessary) | To be determined |
| • Fourth Corrective Action System Evaluation | Week 48 |
| • Expected Site Closure | To be determined |
| • Abandonment of System and Wells | To be determined |

Groundwater monitoring may be performed more frequently than indicated above if the remediation progress warrants. Changes to monitoring frequency will be confirmed with the SCDHEC Project Manager.

# APPENDIX A

## Figures




1,000 0 1,000 2,000
FEET

# FIGURE 1
# TOPOGRAPHIC MAP

HOT SPOT #2015
4424 South Irby Street
Florence, South Carolina
SCDHEC Site ID #17760

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| SIZE | TERRY Project No. | DWG NO. | REV |
|---|---|---|---|
| B | 2230.13 | Figure 1 Topographic Map.dwg | |

SCALE: As Shown

DATE: September 2017

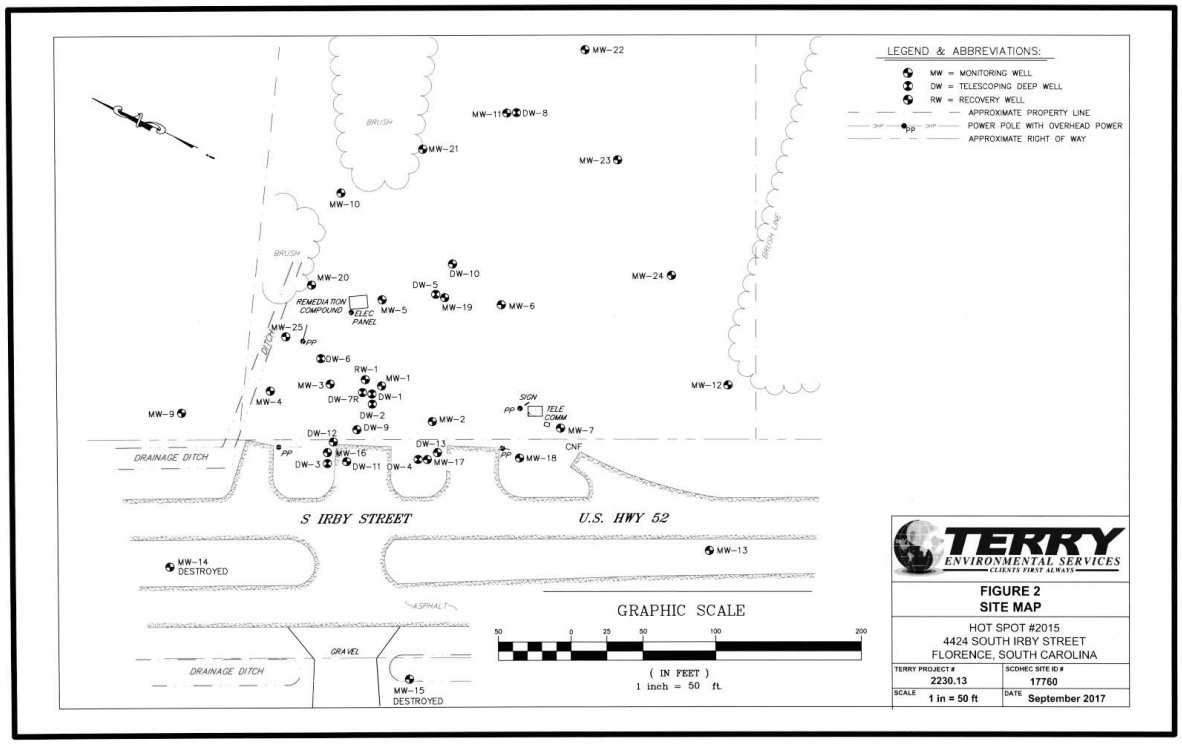


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**FIGURE 2**
**SITE MAP**

HOT SPOT #2015
4424 SOUTH IRBY STREET
FLORENCE, SOUTH CAROLINA

| TERRY PROJECT # | SCDHEC SITE ID # |
|---|---|
| 2230.13 | 17760 |
| SCALE: 1 in = 50 ft | DATE: September 2017 |

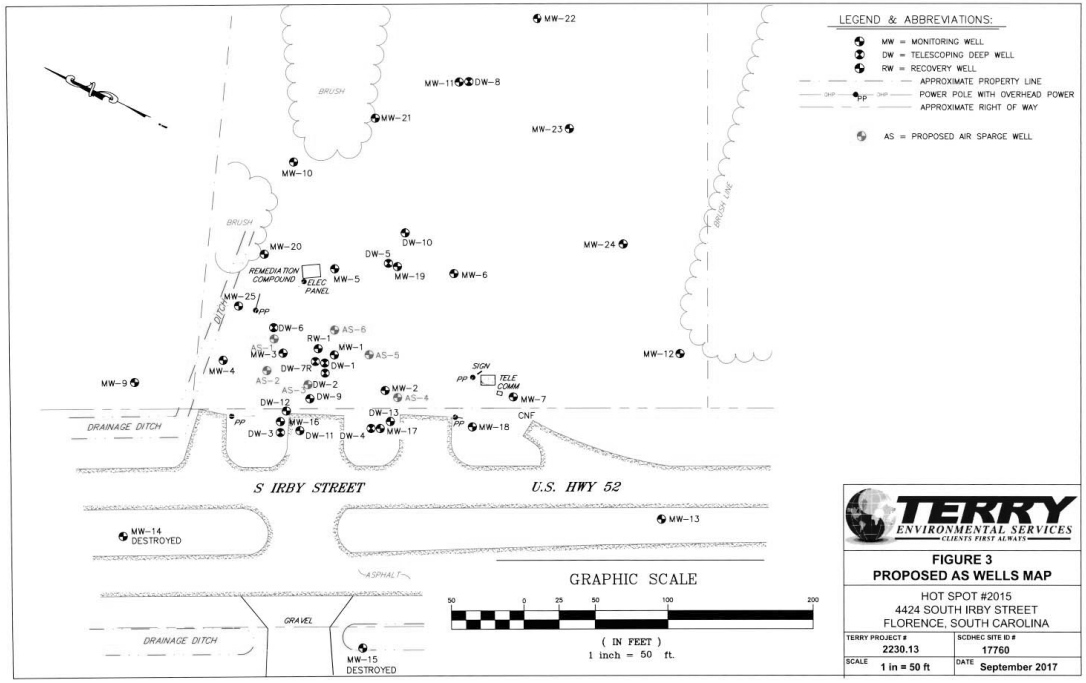


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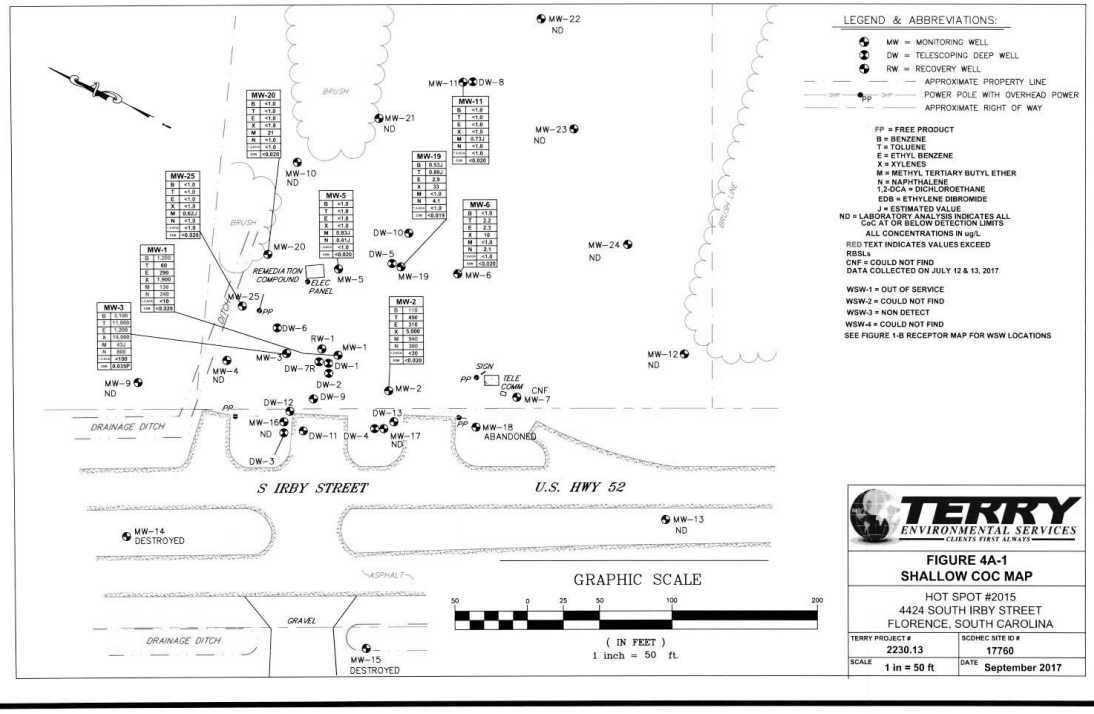
**FIGURE 3**
**PROPOSED AS WELLS MAP**

HOT SPOT #2015
4424 SOUTH IRBY STREET
FLORENCE, SOUTH CAROLINA

| TERRY PROJECT # | SCDHEC SITE ID # |
|---|---|
| 2230.13 | 17760 |
| SCALE: 1 in = 50 ft | DATE: September 2017 |




LEGEND & ABBREVIATIONS:

- MW = MONITORING WELL
- DW = TELESCOPING DEEP WELL
- RW = RECOVERY WELL
- APPROXIMATE PROPERTY LINE
- POWER POLE WITH OVERHEAD POWER
- APPROXIMATE RIGHT OF WAY

FP = FREE PRODUCT
B = BENZENE
T = TOLUENE
E = ETHYL BENZENE
X = XYLENES
M = METHYL TERTIARY BUTYL ETHER
N = NAPHTHALENE
1,2-DCA = DICHLOROETHANE
EDB = ETHYLENE DIBROMIDE
J = ESTIMATED VALUE
ND = LABORATORY ANALYSIS INDICATES ALL CoC AT OR BELOW DETECTION LIMITS
ALL CONCENTRATIONS IN ug/L
RED TEXT INDICATES VALUES EXCEED RBSLs
CNF = COULD NOT FIND
DATA COLLECTED ON JULY 12 & 13, 2017

WSW-1 = OUT OF SERVICE
WSW-2 = COULD NOT FIND
WSW-3 = NON DETECT
WSW-4 = COULD NOT FIND
SEE FIGURE 1-B RECEPTOR MAP FOR WSW LOCATIONS

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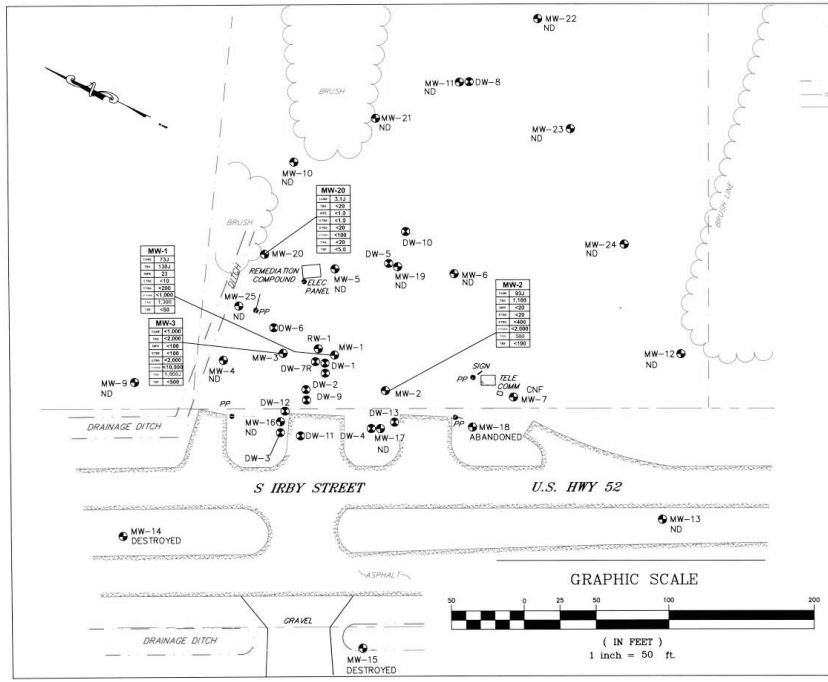
**FIGURE 4A-1**
**SHALLOW COC MAP**

HOT SPOT #2015
4424 SOUTH IRBY STREET
FLORENCE, SOUTH CAROLINA

| TERRY PROJECT # | SCDHEC SITE ID # |
|---|---|
| 2230.13 | 17760 |
| SCALE: 1 in = 50 ft | DATE: September 2017 |




LEGEND & ABBREVIATIONS:

- MW = MONITORING WELL
- DW = TELESCOPING DEEP WELL
- RW = RECOVERY WELL
- APPROXIMATE PROPERTY LINE
- OHP — PP — OHP POWER POLE WITH OVERHEAD POWER
- APPROXIMATE RIGHT OF WAY

FP = FREE PRODUCT

TAME = TERT-AMYL METHYL ETHER or T-AMYL METHYL ETHER
TBA = TERT-BUTYL ALCOHOL or T-BUTANOL
DIPE = ISOPROPYL ETHER or DISOPROPYL ETHER
ETBE = ETHYL TERT-BUTYL ETHER
ETBA = 3,3-DIMETHYL-1-BUTANOL OR ETHYL-TERT-BUTANOL
TAA = TERT-AMYL ALCOHOL
TBF = TERT-BUTYL FORMATE

J = ESTIMATED VALUE
ND = LABORATORY ANALYSIS INDICATES ALL CoC AT OR BELOW DETECTION LIMITS
ALL CONCENTRATIONS IN ug/L
RED TEXT INDICATES VALUES EXCEED RBSLs
CNF = COULD NOT FIND
DATA COLLECTED ON JULY 12 & 13, 2017

WSW-1 = COULD NOT FIND
WSW-2 = OUT OF SERVICE
WSW-3 = NON DETECT
WSW-4 = COULD NOT FIND
SEE FIGURE 1-B, RECEPTOR MAP, FOR WSW LOCATIONS

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**FIGURE 4B-1**
**SHALLOW OXYGENATES MAP**

HOT SPOT #2015
4424 SOUTH IRBY STREET
FLORENCE, SOUTH CAROLINA

| TERRY PROJECT # | SCDHEC SITE ID # |
|---|---|
| 2230.13 | 17760 |
| SCALE: 1 in = 50 ft | DATE: September 2017 |

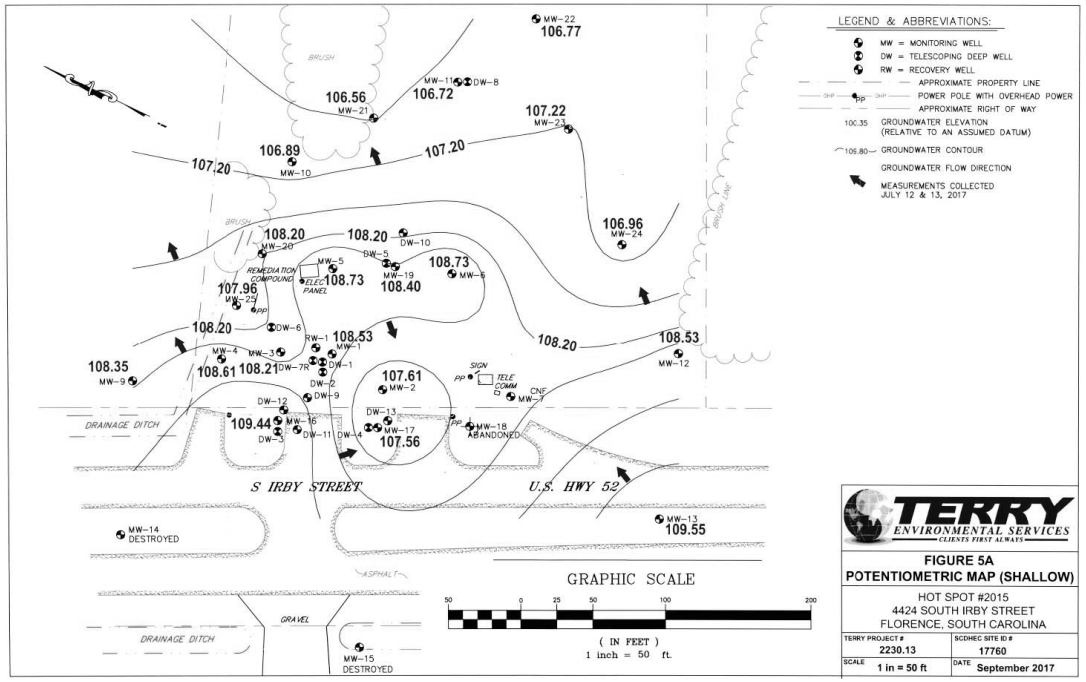
LEGEND & ABBREVIATIONS:
MW = MONITORING WELL
DW = TELESCOPING DEEP WELL
RW = RECOVERY WELL
APPROXIMATE PROPERTY LINE
POWER POLE WITH OVERHEAD POWER
APPROXIMATE RIGHT OF WAY
100.35 GROUNDWATER ELEVATION (RELATIVE TO AN ASSUMED DATUM)
100.80 GROUNDWATER CONTOUR
GROUNDWATER FLOW DIRECTION
MEASUREMENTS COLLECTED JULY 12 & 13, 2017
S IRBY STREET
U.S. HWY 52
DRAINAGE DITCH
BRUSH
ASPHALT
GRAVEL
REMEDIATION COMPOUND
ELEC. PANEL
SIGN
TELE COMM
CNF
ABANDONED
DESTROYED
GRAPHIC SCALE
50 0 25 50 100 200
( IN FEET )
1 inch = 50 ft.
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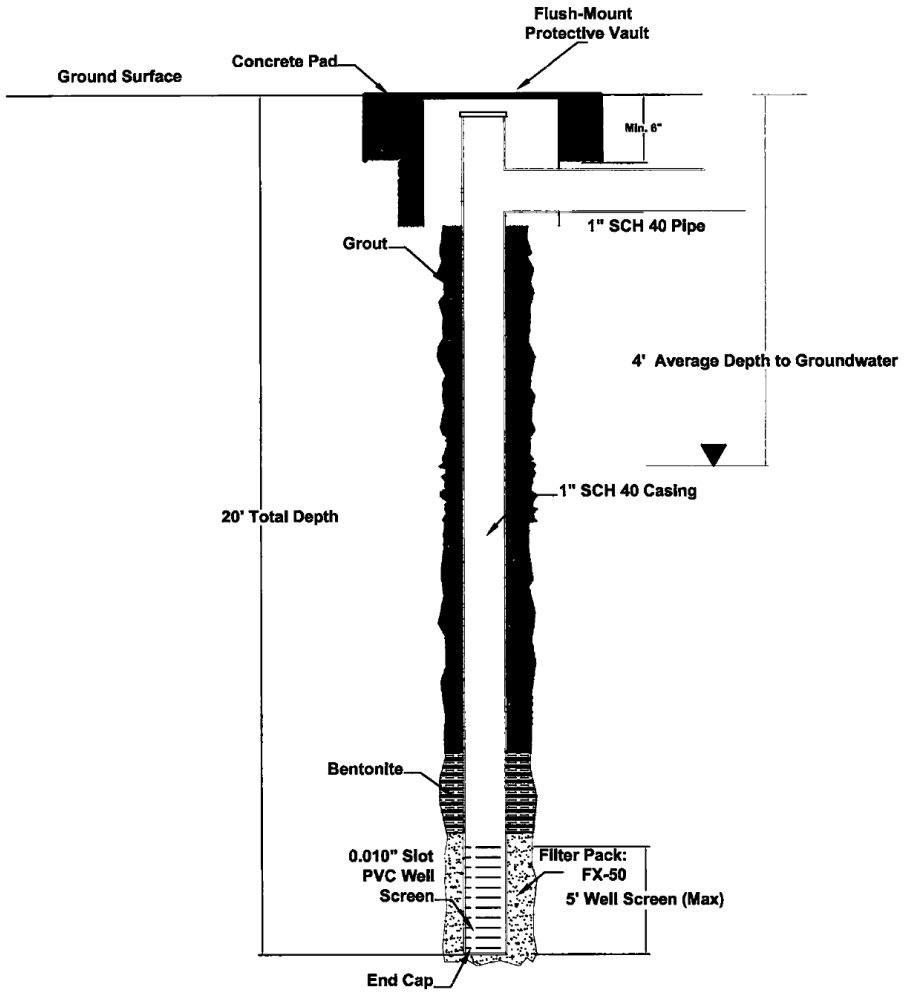
FIGURE 5A
POTENTIOMETRIC MAP (SHALLOW)
HOT SPOT #2015
4424 SOUTH IRBY STREET
FLORENCE, SOUTH CAROLINA
TERRY PROJECT # 2230.13
SCDHEC SITE ID # 17760
SCALE 1 in = 50 ft
DATE September 2017

WELL CONSTRUCTION DETAIL

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and making their obectives our own!

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# FIGURE 6
# INJECTION WELL CONSTRUCTION DETAIL

Former HOT SPOT #2015
4424 South Irby Street
Florence, South Carolina
SCDHEC UST Permit # 17760

| SIZE | TERRY Project No. | DWG NO. | REV |
|---|---|---|---|
| B | 2230.13 | 4 | |

SCALE: NOT TO SCALE

DATE: September 2017

# APPENDIX B

## Tables

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-MW1 | 1/20/2000 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 3/7/2001 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 3/6/2003 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 7/30/2003 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 1/30/2004 | 2,600 | 2,400 | 490 | 4,000 | 2,900 | 520 | -- | -- |
| | 8/3/2004 | 1,600 | 630 | 1,500 | 2,800 | 2,300 | 480 | -- | -- |
| | 3/30/2005 | 3,200 | <5,000 | <1,000 | 5,300 | 3,000 | 94 | -- | -- |
| | 9/30/2005 | 3,000 | 1,400 | 940 | 4,400 | 2,600 | 390 | -- | -- |
| | 3/28/2006 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 10/16/2006 | 1,300 | 1,300 | 660 | 4,600 | 1,600 | 830 | -- | -- |
| | 4/10/2007 | 1,400 | <1,200 | <250 | 2,500 | 1,700 | 190 | -- | -- |
| | 9/12/2007 | 1,270 | 1,090 | <100 | 4,200 | 1,230 | 1,040 | -- | -- |
| | 3/25/2008 | 1,050 | 1,310 | 107 | 1,630 | 822 | 292 | -- | -- |
| | 10/15/2008 | 829 | 1,510 | 157 | 1,580 | 210 | <100 | -- | -- |
| | 1/15/2009 | 1,480 | 1,540 | <20 | 2,420 | 524 | 261 | -- | -- |
| | 4/21/2009 | 2,750 | 2,300 | 509 | 3,850 | 670 | 494 | -- | -- |
| | 8/12/2009 | 3,510 | 3,200 | 1,080 | 7,360 | 598 | 1,350 | -- | -- |
| | 11/10/2009 | 2,750 | 3,070 | 869 | 6,750 | 717 | 1,090 | -- | -- |
| | 3/23/2010 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 10/18/2011 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 5/1/2014 | 2,100 | 1,100 | 460 | 2,800 | 280 | 330 | <50 | -- |
| | 10/9/2015 | 1,300 | 220 | 260 | 2,400 | 140 | 250 | <20 | 0.012J |
| | 7/28/2016 | 1,400 | 280 | 320 | 1,800 | 160 | 200 | <50 | -- |
| | 7/13/2017 | 1,200 | 60 | 290 | 1,900 | 130 | 240 | <10 | <0.020 |
| 17760-MW2 | 3/20/1997 | 4,160 | 13,900 | 2,630 | 11,900 | -- | <5 | -- | -- |
| | 1/20/2000 | 1,800 | 5,300 | 880 | 5,900 | 170 | 320 | -- | -- |
| | 3/7/2001 | 2,000 | 9,000 | 1,300 | 9,600 | 240 | 440 | -- | -- |
| | 3/6/2003 | 1,400 | 3,100 | 950 | 5,400 | 260 | 410 | -- | -- |
| | 7/30/2003 | 250 | <500 | 420 | 1,800 | 320 | 60 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | 5.4 | 144 | 4.9 | -- | -- |
| | 8/3/2004 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 3/30/2005 | 86 | 2,300 | 780 | 29,000 | 1,200 | 1,300 | -- | -- |
| | 9/30/2005 | 40 | <500 | 160 | 6,900 | 380 | 1,200 | -- | -- |
| | 3/28/2006 | 15 | 420 | 200 | 4,200 | 280 | 610 | -- | -- |
| | 10/16/2006 | 8.8 | 73 | 12 | 700 | 140 | 53 | -- | -- |
| | 4/10/2007 | 140 | 1,300 | 390 | 3,600 | 820 | 200 | -- | -- |
| | 9/12/2007 | 58.1 | 306 | 47.5 | 1,490 | 1,210 | 201 | -- | -- |
| | 3/25/2008 | 45.3 | 281 | 78.2 | 1,290 | 640 | 130 | -- | -- |
| | 10/15/2008 | 76.9 | 537 | 130 | 2,650 | 707 | <100 | -- | -- |
| | 1/15/2009 | 54.5 | 251 | <10 | 1,660 | 852 | 116 | -- | -- |
| | 4/21/2009 | <50.0 | 2,190 | 1,120 | 13,800 | 928 | 1,570 | -- | -- |
| | 8/12/2009 | 85.5 | 1,240 | 1,110 | 14,900 | 718 | 2,950 | -- | -- |
| | 11/10/2009 | 54.6 | 363 | 109 | 2,320 | 905 | 316 | -- | -- |
| | 3/23/2010 | 25.7 | 132 | 31.7 | 1,400 | 521 | 124 | -- | -- |
| | 10/18/2011 | 25.5 | 257 | 28.4 | 1,100 | 653 | 122 | -- | -- |
| | 5/1/2014 | 44 | 240 | 100 | 2,100 | 610 | 130 | <10 | -- |
| | 10/9/2015 | 63 | 120 | 120 | 2,400 | 810 | 92 | <10 | <0.019 |
| | 7/28/2016 | 57 | 270 | 170 | 2,300 | 530 | 160 | <20 | -- |
| | 7/13/2017 | 110 | 450 | 310 | 5,000 | 940 | 300 | <20 | <0.020 |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-MW3 | 1/20/2000 | 5,300 | 4,500 | 1,200 | 5,000 | 2,500 | 300 | -- | -- |
| | 3/7/2001 | 8,500 | 13,000 | 2,700 | 13,000 | 2,100 | 610 | -- | -- |
| | 3/6/2003 | 7,200 | 11,000 | 1,900 | 10,000 | 2,000 | 490 | -- | -- |
| | 7/30/2003 | 5,000 | 16,000 | 1,700 | 13,000 | 1,100 | 160 | -- | -- |
| | 1/30/2004 | 280 | 470 | 170 | 1,500 | 760 | 100 | -- | -- |
| | 8/3/2004 | 2,100 | 5,900 | 930 | 9,000 | 2,800 | 340 | -- | -- |
| | 3/30/2005 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 9/30/2005 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 3/28/2006 | 1,800 | 2,900 | <100 | 5,500 | 1,000 | 1,000 | -- | -- |
| | 10/16/2006 | 9.3 | <25 | 6.2 | 62 | 280 | <25 | -- | -- |
| | 4/10/2007 | 3,200 | 2,000 | 180 | 1,200 | 1,000 | 45 | -- | -- |
| | 9/12/2007 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 3/25/2008 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 10/15/2008 | 13,200 | 34,500 | 3,340 | 21,800 | <250 | <1,250 | -- | -- |
| | 1/15/2009 | 13,400 | 31,000 | 4,870 | 31,600 | 416 | 1,930 | -- | -- |
| | 4/21/2009 | 9,260 | 30,800 | 3,370 | 23,400 | <500 | 976J | -- | -- |
| | 8/12/2009 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 11/10/2009 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 3/23/2010 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 10/18/2011 | 72,000 | 260,000 | 40,000 | 180,000 | 900,000 | 20,000 | -- | -- |
| | 5/1/2014 | Free Product (0.27 ft) | | | | | | | |
| | 10/9/2015 | Free Product (0.04 ft) | | | | | | | |
| | 7/28/2016 | 3,800 | 10,000 | 1,600 | 15,000 | 120 | 1,100 | <100 | -- |
| | 7/13/2017 | 3,100 | 11,000 | 1,200 | 14,000 | 43J | 800 | <100 | 0.035P |
| 17760-MW3 (DUP) | 7/13/2017 | 3,100 | 11,000 | 1,200 | 14,000 | 46J | 790 | <100 | <0.019 |
| 17760-MW4 | 1/20/2000 | 480 | 170 | 160 | 570 | 400 | 85 | -- | -- |
| | 3/7/2001 | 1,300 | 630 | 770 | 2,400 | 1,200 | 230 | -- | -- |
| | 3/6/2003 | 2,100 | 1,400 | 830 | 2,800 | 570 | 170 | -- | -- |
| | 7/30/2003 | 8.7 | <5.0 | 8.4 | <3.0 | 230 | 11 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | 20 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | 9.6 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | 2.1 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | 19 | <5.0 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | 10 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | 1.7 | <5.0 | -- | -- |
| | 4/10/2007 | Dry | | | | | | | |
| | 9/12/2007 | Dry | | | | | | | |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | 1.12 | <5.0 | -- | -- |
| | 1/15/2009 | <1.0 | 2.71 | 0.814J | 9.65 | <1.0 | 4.07J | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | 8.38 | 6.59 | -- | -- |
| | 8/12/2009 | <1.00 | <1.00 | <1.00 | 4.00 | 3.86 | 7.81 | -- | -- |
| | 11/10/2009 | 1.06 | <1.00 | <1.00 | <3.00 | 30.4 | 1.66J | -- | -- |
| | 3/23/2010 | 455 | 133 | 123 | 399 | 115 | 49.6 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | 9.80 | <5.00 | -- | -- |
| | 5/1/2014 | Could Not Find | | | | | | | |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| | 7/28/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-MW5 | 1/20/2000 | **22** | 22 | 150 | 650 | **57** | **130** | -- | -- |
| | 3/7/2001 | **19** | 3.3 | 34 | 120 | 40 | 24 | -- | -- |
| | 3/6/2003 | **120** | 280 | 55 | 440 | **720** | 3.4 | -- | -- |
| | 7/30/2003 | **170** | 870 | 260 | 1,400 | **570** | **59** | -- | -- |
| | 1/30/2004 | **7.3** | <5.0 | 1.2 | 18 | **280** | <1.0 | -- | -- |
| | 8/3/2004 | **10** | <5.0 | <1.0 | 9.5 | **43** | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | **50** | <1.0 | -- | -- |
| | 9/30/2005 | **9.5** | <5.0 | 14 | 57 | **84** | 19 | -- | -- |
| | 3/28/2006 | **10** | <5.0 | 16 | <3.0 | **88** | 3.9 | -- | -- |
| | 10/16/2006 | **16** | 130 | 61 | 490 | **57** | 19 | -- | -- |
| | 4/10/2007 | **8.7** | 7.5 | 4.1 | 67 | **130** | 11 | -- | -- |
| | 9/12/2007 | **7.99** | 23.8 | 14.7 | 242 | 28.4 | 21.9 | -- | -- |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | 9.5 | 7.9 | -- | -- |
| | 10/15/2008 | **10.6** | <1.0 | 5.95 | 4.2 | 19.1 | <5.0 | -- | -- |
| | 1/15/2009 | 0.549J | 1.44 | <1.0 | 4.65 | 12 | 3.36J | -- | -- |
| | 4/21/2009 | **7.05** | <1.0 | 8.35 | 9.04 | 27.4 | 8.23 | -- | -- |
| | 8/12/2009 | **10.3** | 2.38 | 24.9 | 19.0 | 31.8 | 18.9 | -- | -- |
| | 11/10/2009 | 3.88 | <1.00 | <1.00 | 66.1 | **76.1** | 2.49J | -- | -- |
| | 3/23/2010 | 1.00 | <1.00 | <1.00 | <3.00 | 15.1 | 7.09 | -- | -- |
| | 10/18/2011 | **9.04** | <1.00 | 6.27 | 16.1 | 39.6 | 10.6 | -- | -- |
| | 5/1/2014 | 0.57J | 0.75J | 4.2 | 32 | 1.7 | 2.6 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | 2.1 | <1.0 | 0.58J | <1.0 | <0.019 |
| | 7/28/2016 | 0.56J | 1.4 | 1.0 | 1.0 | 2.9 | 1.9 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | 0.83J | 0.41J | <1.0 | <0.020 |
| 17760-MW6 | 1/20/2000 | **74** | 110 | 380 | 1,400 | **1,300** | **190** | -- | -- |
| | 3/7/2001 | 3.6 | <1.0 | <1.0 | 5.9 | **780** | 1.8 | -- | -- |
| | 3/6/2003 | **1,400** | **30,000** | **5,600** | **33,000** | **2,900** | **1,000** | -- | -- |
| | 7/30/2003 | **480** | **5,000** | **1,100** | **12,000** | **4,100** | **810** | -- | -- |
| | 1/30/2004 | **28** | 350 | 100 | 1,300 | **290** | 25 | -- | -- |
| | 8/3/2004 | **6.4** | 43 | <1.0 | 460 | **78** | 4.4 | -- | -- |
| | 3/30/2005 | **31** | 400 | 68 | 1,600 | **580** | 25 | -- | -- |
| | 9/30/2005 | **120** | **1,200** | 130 | 2,800 | **470** | 17 | -- | -- |
| | 3/28/2006 | **15** | <50 | <10 | 1,400 | **690** | 17 | -- | -- |
| | 10/16/2006 | **8.4** | 42 | 22 | 360 | **92** | 19 | -- | -- |
| | 4/10/2007 | **8.5** | 74 | 16 | 290 | **110** | 12 | -- | -- |
| | 9/12/2007 | **72.9** | **1,340** | 263 | 4,180 | **139** | **124** | -- | -- |
| | 3/25/2008 | <5.0 | 11.7 | 10.5 | 244 | 13.1 | 11.5 | -- | -- |
| | 10/15/2008 | **12.8** | 24.1 | 46.6 | 372 | 22.4 | <10.0 | -- | -- |
| | 1/15/2009 | 3.92 | 2.12 | 17.6 | 94.3 | 15.2 | 7.23 | -- | -- |
| | 4/21/2009 | 4.68 | <1.0 | 25.7 | 167 | 16.9 | 9.21 | -- | -- |
| | 8/12/2009 | **22.0** | 5.17 | 11.6 | 97.7 | 6.20 | 13.0 | -- | -- |
| | 11/10/2009 | 3.01 | 5.38 | 7.75 | 75.3 | 5.79 | 5.47 | -- | -- |
| | 3/23/2010 | 0.891J | <1.00 | 4.60 | 19.8 | 7.15 | 7.27 | -- | -- |
| | 10/18/2011 | **18.1** | 331 | 105 | 538 | 3.36 | **33.7** | -- | -- |
| | 5/1/2014 | 0.54J | 2.1 | 7.4 | 21 | <1.0 | 5.2 | <1.0 | -- |
| | 10/8/2015 | <1.0 | 0.54J | 2.4 | 7.4 | <1.0 | 1.2 | <1.0 | <0.019 |
| | 7/28/2016 | <1.0 | <1.0 | 1.4 | 3.0 | <1.0 | 1.5 | <1.0 | -- |
| | 7/12/2017 | <1.0 | 2.2 | 2.3 | 10 | <1.0 | 2.1 | <1.0 | <0.020 |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| **RBSL** | | **5** | **1,000** | **700** | **10,000** | **40** | **25** | **5** | **ug/L** |
| **Units** | | **ug/L** | **ug/L** | **ug/L** | **ug/L** | **ug/L** | **ug/L** | **ug/L** | **0.05** |
| 17760-MW7 | 1/20/2000 | **2,200** | 250 | 490 | 700 | **3,300** | **130** | -- | -- |
| | 3/7/2001 | **1,700** | 490 | 440 | 860 | **4,300** | **87** | -- | -- |
| | 3/6/2003 | **1,700** | 420 | 310 | 750 | **3,000** | **94** | -- | -- |
| | 7/30/2003 | **430** | <5.0 | 62 | 110 | **2,200** | **27** | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | 24 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | 8.3 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | 5.9 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 4/10/2007 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 9/12/2007 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | 2.9 | <5.0 | -- | -- |
| | 1/15/2009 | 1.27 | 3.48 | <1.0 | 4.87 | 5.12 | 3.33J | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | 6.60 | <5.0 | -- | -- |
| | 8/12/2009 | <1.00 | <1.00 | 1.85 | 7.07 | 1.58 | 6.51 | -- | -- |
| | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | 4.33 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/9/2015 | Could Not Find | | | | | | | |
| | 7/13/2017 | Could Not Find | | | | | | | |
| 17760-MW8 | 1/20/2000 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | -- | -- |
| | 3/7/2001 | 1.9 | <1.0 | <1.0 | <3.0 | <1.0 | 5.4 | -- | -- |
| | 3/6/2003 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | 2.2 | -- | -- |
| | 7/30/2003 | <1.0 | <1.0 | <1.0 | <3.0 | 1.2 | <1.0 | -- | -- |
| | 1/30/2004 | <1.0 | <1.0 | <1.0 | <3.0 | 6.9 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <1.0 | <1.0 | <3.0 | 3.4 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/28/2006 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 4/10/2007 | Not Sampled | | | | | | | |
| | 9/12/2007 | Dry | | | | | | | |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | 2.75 | 8.1 | <1.0 | <5.0 | -- | -- |
| | 1/15/2009 | 0.992J | 3.24 | <1.0 | 5.32 | <1.0 | 3.48J | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 8/12/2009 | DESTROYED | | | | | | | |
| | 11/10/2009 | DESTROYED | | | | | | | |
| | 3/23/2010 | DESTROYED | | | | | | | |
| | 10/18/2011 | DESTROYED | | | | | | | |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-MW9 | 3/7/2001 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/6/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 7/30/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | 1.3 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | 1.4 | <5.0 | -- | -- |
| | 4/10/2007 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 9/12/2007 | <1.0 | <1.0 | <1.0 | <3.0 | 1.46 | <5.0 | -- | -- |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 1/15/2009 | 0.643J | 2.43 | <1.0 | 4.9 | <1.0 | <5.0 | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 8/12/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | 6.39 | -- | -- |
| | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | 3.36 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | 1.69 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| | 7/28/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-MW10 | 3/7/2001 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/6/2003 | <1.0 | <5.0 | <1.0 | <3.0 | 23 | <1.0 | -- | -- |
| | 7/30/2003 | **18** | <50 | 22 | 41 | 14 | <1.0 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | **470** | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | 24 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | 2.7 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | 9.2 | <1.0 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | 4.7 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | 11 | <5.0 | -- | -- |
| | 4/10/2007 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 9/12/2007 | <1.0 | <1.0 | <1.0 | <3.0 | 12.5 | <5.0 | -- | -- |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 1/15/2009 | 1.14 | 4.03 | <1.0 | 5.26 | <1.0 | <5.0 | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 8/12/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | 1.67 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-MW11 | 3/7/2001 | <1.0 | <1.0 | <1.0 | <3.0 | 1 | <1.0 | -- | -- |
| | 3/6/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 7/30/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | 8.5 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | 68 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | 9.9 | <1.0 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | 4.5 | <5.0 | -- | -- |
| | 4/10/2007 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 9/12/2007 | <1.0 | <1.0 | <1.0 | <3.0 | 23.2 | <5.0 | -- | -- |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 1/15/2009 | <1.0 | 1.28 | <1.0 | 4.31 | <1.0 | <5.0 | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 8/12/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | 13.1 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | 0.73J | <1.0 | <1.0 | <0.020 |
| 17760-MW12 | 3/7/2001 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/6/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | 1.2 | -- | -- |
| | 7/30/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 4/10/2007 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 9/12/2007 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 1/15/2009 | 0.808J | 3.29 | <1.0 | 4.99 | <1.0 | <5.0 | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 8/12/2009 | <1.00 | 1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-MW13 | 3/7/2001 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/6/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 7/30/2003 | <1.0 | 46 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | 9.9 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 4/10/2007 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 9/12/2007 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 1/15/2009 | 1.04 | 2.87 | <1.0 | 4.57 | <1.0 | <5.0 | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 8/12/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | 2.3 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/9/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/28/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-MW14 | 3/7/2001 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/6/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 7/30/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 4/10/2007 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 9/12/2007 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | 0.951 | -- | -- |
| | 3/25/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 1/15/2009 | <1.0 | 2.99 | <1.0 | 4.79 | <1.0 | <5.0 | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 8/12/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | Could Not Find | | | | | | | |
| | 10/9/2015 | DESTROYED | | | | | | | |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-MW15 | 3/7/2001 | <1.0 | <1.0 | <1.0 | <3.0 | <1.0 | 1.2 | -- | -- |
| | 3/6/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 7/30/2003 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 1/30/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 8/3/2004 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 3/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 9/30/2005 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <2.5 | -- | -- |
| | 3/28/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <1.0 | -- | -- |
| | 10/16/2006 | <1.0 | <5.0 | <1.0 | <3.0 | <1.0 | <5.0 | -- | -- |
| | 4/10/2007 | <1.0 | <5.0 | <1.0 | <3.0 | 1.7 | <5.0 | -- | -- |
| | 9/12/2007 | Dry | | | | | | | |
| | 3/26/2008 | <5.0 | <5.0 | <5.0 | <10.0 | <5.0 | <5.0 | -- | -- |
| | 10/15/2008 | <1.0 | <1.0 | <1.0 | <3.0 | 5.51 | <5.0 | -- | -- |
| | 1/15/2009 | 0.962J | 3.89 | <1.0 | 5.32 | 5.57 | <5.0 | -- | -- |
| | 4/21/2009 | <1.0 | <1.0 | <1.0 | <3.0 | 7.92 | <5.0 | -- | -- |
| | 8/12/2009 | <1.00 | <1.00 | <1.00 | <3.00 | 2.63 | <5.00 | -- | -- |
| | 11/10/2009 | Dry | | | | | | | |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | 12.7 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | Could Not Find | | | | | | | |
| | 10/9/2015 | DESTROYED | | | | | | | |
| 17760-MW16 | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | 7.53 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/9/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/28/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| 17760-MW17 | 11/10/2009 | **5.53** | <1.00 | <1.00 | <3.00 | 33.9 | 5.87 | -- | -- |
| | 3/23/2010 | **6.31** | <1.00 | <1.00 | <3.00 | 30.9 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | 12.7 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | 33 | <1.0 | <1.0 | -- |
| | 10/9/2015 | <1.0 | <1.0 | <1.0 | <1.0 | 2.4 | <1.0 | <1.0 | <0.019 |
| | 7/28/2016 | <1.0 | <1.0 | 1.0 | <1.0 | 0.84J | 0.40J | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | 1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-MW18 | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | 5.80 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/9/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | ABANDONED | | | | | | | |
| 17760-MW19 | 11/10/2009 | **443** | 817 | 225 | 2,180 | **196** | **159** | -- | -- |
| | 3/23/2010 | **604** | **4,770** | **1,010** | 7,670 | **1,510** | **470** | -- | -- |
| | 10/18/2011 | **313** | **1,130** | 286 | 3,220 | **245** | **296** | -- | -- |
| | 5/1/2014 | 0.72J | 0.41J | 2.7 | 20 | <1.0 | 3.8 | <1.0 | -- |
| | 10/8/2015 | 0.63J | 1.2 | <1.0 | 8.6 | <1.0 | 1.8 | <1.0 | <0.020 |
| | 7/28/2016 | 1.0 | <1.0 | 1.8 | 5.0 | 0.45J | 4.4 | <1.0 | -- |
| | 7/12/2017 | 0.53J | 0.69J | 2.9 | 33 | <1.0 | 4.1 | <1.0 | <0.019 |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-MW20 | 4/12/2012 | **51.8** | <5.00 | 28.4 | 32.3 | **460** | 23.3J | -- | -- |
| | 5/1/2014 | 0.53J | <1.0 | <1.0 | <1.0 | 9.2 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | 23 | <1.0 | <1.0 | <0.019 |
| | 7/28/2016 | <1.0 | <1.0 | <1.0 | <1.0 | 3.7 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | 21 | <1.0 | <1.0 | <0.020 |
| 17760-MW21 | 4/12/2012 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-MW22 | 4/12/2012 | <1.00 | <1.00 | <1.00 | <3.00 | 13.6 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-MW23 | 4/12/2012 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-MW24 | 4/12/2012 | <1.00 | <1.00 | <1.00 | <3.00 | 2.27 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | 13 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-MW25 | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/28/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | 0.62J | <1.0 | <1.0 | <0.020 |
| 17760-DW1 | 1/20/2000 | **580** | 7.9 | 180 | 340 | <5.0 | **84** | -- | -- |
| | 2/19/2001 | **720** | <50 | 110 | <150 | **140** | **26** | -- | -- |
| | 3/6/2003 | **450** | 26 | 170 | 250 | **79** | **50** | -- | -- |
| | 7/30/2003 | **500** | <50 | 260 | 330 | 14 | **88** | -- | -- |
| | 1/30/2004 | **270** | <5.0 | 160 | 200 | <1.0 | **63** | -- | -- |
| | 8/3/2004 | **160** | <5.0 | 350 | <15 | 17 | 7.8 | -- | -- |
| | 3/30/2005 | **180** | <500 | <100 | <300 | <100 | **53** | -- | -- |
| | 9/30/2005 | **360** | <5.0 | 190 | 160 | 16 | **59** | -- | -- |
| | 3/28/2006 | **51** | <50 | <10 | <30 | 24 | **43** | -- | -- |
| | 10/16/2006 | **270** | <5.0 | 200 | 35 | 22 | **86** | -- | -- |
| | 4/10/2007 | **250** | <5.0 | 110 | 6.9 | 25 | **47** | -- | -- |
| | 9/12/2007 | **316** | 3.89 | 186 | <15.0 | **46.8** | **61.3** | -- | -- |
| | 3/25/2008 | **305** | <10.0 | 224 | <20.0 | **73.5** | **81.7** | -- | -- |
| | 10/15/2008 | **455** | <5.0 | 164 | <15.0 | **95.5** | <25.0 | -- | -- |
| | 1/15/2009 | **477** | <5.0 | 162 | <15.0 | **134** | **42.1** | -- | -- |
| | 4/21/2009 | **474** | <5.0 | 227 | <15.0 | **159** | **73.9** | -- | -- |
| | 8/12/2009 | **589** | 7.59 | 302 | 18.6 | **177** | **110** | -- | -- |
| | 11/10/2009 | **389** | 22.9 | 218 | 43.3 | **143** | **55.3** | -- | -- |
| | 3/23/2010 | **497** | <5.00 | 281 | <15.0 | **227** | **66.2** | -- | -- |
| | 10/18/2011 | **482** | <5.00 | 338 | <15.0 | **90.4** | **93.2** | -- | -- |
| | 5/1/2014 | **460** | <10 | 290 | <10 | **95** | **110** | <10 | -- |
| | 10/9/2015 | **320** | <10 | 390 | <10 | **43** | **140** | <10 | <0.020 |
| | 7/28/2016 | **210** | 2.3J | 390 | 17 | **59** | **170** | <5.0 | -- |
| | 7/13/2017 | **6.8** | <1.0 | 64 | 1.1 | **44** | 5.4 | <1.0 | <0.020 |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| RBSL | | 5 | 1,000 | 700 | 10,000 | 40 | 25 | 5 | ug/L |
| Units | | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | 0.05 |
| 17760-DW2 | 10/15/2008 | **109** | 6.41 | 19.1 | 21.4 | 20.1 | <5.0 | -- | -- |
| | 1/15/2009 | **141** | 4.04 | 37.1 | 15.9 | 23.3 | 4.01J | -- | -- |
| | 4/21/2009 | **93.4** | 3.84 | 27.7 | 16.5 | 27.2 | 6.90 | -- | -- |
| | 8/12/2009 | **99.1** | 3.20 | 26.5 | 12.7 | 28.8 | 8.00 | -- | -- |
| | 11/10/2009 | **127** | 1.88 | 40.2 | 6.62 | 39.7 | 4.92J | -- | -- |
| | 3/23/2010 | **96.9** | 2.38 | 34.2 | 8.49 | 36.5 | 6.31 | -- | -- |
| | 10/18/2011 | **92.4** | 1.31 | 43.0 | 0.873J | **43.8** | 10.5 | -- | -- |
| | 5/1/2014 | **8.9** | 0.86J | 77 | <1.0 | **41** | 1.6 | <1.0 | -- |
| | 10/9/2015 | **5.9** | 0.26J | 160 | 1.2 | 37 | 2.6 | <1.0 | <0.019 |
| | 7/27/2016 | **9.9** | <1.0 | 100 | 1.0 | 36 | 3.4 | <1.0 | -- |
| | 7/13/2017 | **57** | <5.0 | 240 | 2.6J | 24 | **99** | <5.0 | <0.019 |
| 17760-DW3 | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | 2.75 | <1.00 | 8.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | 0.189J | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/9/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-DW4 | 11/10/2009 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | 0.178J | <1.00 | <1.00 | <3.00 | 0.706J | <5.00 | -- | -- |
| | 5/1/2014 | 0.19J | <1.0 | <1.0 | <1.0 | 2.6 | <1.0 | <1.0 | -- |
| | 10/9/2015 | 0.42J | <1.0 | <1.0 | <1.0 | 2.1 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | 2.2 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | 2.8 | <1.0 | <1.0 | <0.020 |
| 17760-DW5 | 3/23/2010 | **180** | 173 | 153 | 215 | **62.2** | **40.4** | -- | -- |
| | 10/18/2011 | **124** | 22.8 | 258 | 183 | **250** | **145** | -- | -- |
| | 5/1/2014 | **240** | 18J | 270 | 140 | **440** | **120** | <20 | -- |
| | 10/8/2015 | **370** | 34 | 190 | 160 | **620** | **110** | **9.7** | <0.019 |
| | 7/28/2016 | **44** | <5.0 | 33 | <5.0 | **520** | <5.0 | <5.0 | -- |
| | 7/12/2017 | **340** | 60 | 220 | 63 | **490** | **130** | <5.0 | <0.020 |
| 17760-DW6 | 3/23/2010 | 2.10 | 8.35 | 1.50 | 11.2 | 4.52 | 5.64 | -- | -- |
| | 10/18/2011 | 3.97 | 0.767J | 4.06 | 0.815J | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | 1.9 | <1.0 | 1.4 | <1.0 | <1.0 | 0.62J | <1.0 | -- |
| | 10/9/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-DW7 | 3/23/2010 | 3.23 | 10.1 | 2.45 | 17.3 | 1.54 | 5.85 | -- | -- |
| | 10/18/2011 | **199** | 119 | 28.4 | 160 | **44.4** | 4.81J | -- | -- |
| | 4/9/2012 | Well Abandoned | | | | | | | |
| 17760-DW7R | 4/12/2012 | **60.0** | 186 | 47.0 | 327 | 12.8 | 13.2 | -- | -- |
| | 4/23/2012 | **138** | 123 | 74.3 | 318 | **66.7** | 20.4 | -- | -- |
| | 5/1/2014 | **200** | 5.7 | 200 | 15 | **99** | 15 | **5.1** | -- |
| | 10/9/2015 | **46** | 3.1 | 71 | 6.9 | 20 | 7.6 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | **6.4** | 1.5 | 26 | 2.9 | 8.9 | 6.3 | <1.0 | <0.019 |
| 17760-DW8 | 4/12/2012 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.021 |

**TABLE 1A**
**GROUNDWATER LABORATORY DATA**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC SITE ID #17760**
**TERRY PROJECT #2230.13**

| Well No. | Sample Date | Benzene | Toluene | Ethyl benzene | Total Xylenes | MTBE | Naph thalene | 1,2-DCA | EDB |
|---|---|---|---|---|---|---|---|---|---|
| **RBSL** | | **5** | **1,000** | **700** | **10,000** | **40** | **25** | **5** | **ug/L** |
| **Units** | | **ug/L** | **ug/L** | **ug/L** | **ug/L** | **ug/L** | **ug/L** | **ug/L** | **0.05** |
| 17760-DW9 | 10/9/2015 | <1.0 | <1.0 | <1.0 | 0.63J | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | 0.60J | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| 17760-DW10 | 10/8/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | 0.41J | <1.0 | <1.0 | <1.0 | 1.3 | <1.0 | <1.0 | -- |
| | 7/12/2017 | 1.5 | <1.0 | <1.0 | <1.0 | 4.9 | <1.0 | <1.0 | <0.020 |
| 17760-DW11 | 10/9/2015 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.019 |
| | 7/27/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-DW12 | 10/9/2015 | **30** | 0.57J | 39 | 12 | **98** | 19 | <1.0 | <0.020 |
| | 7/28/2016 | **13** | 57 | 18 | 150 | **130** | 14 | <1.0 | -- |
| | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | 36 | 0.41J | <1.0 | <0.020 |
| 17760-DW12 (DUP) | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | 37 | 0.45J | <1.0 | <0.019 |
| 17760-DW13 | 10/9/2015 | **42** | 0.90J | 89 | 6.6 | 12 | 17 | <1.0 | <0.020 |
| | 7/28/2016 | **28** | 0.79J | 73 | 1.6 | 20 | 23 | <1.0 | -- |
| | 7/13/2017 | **30** | <5.0 | 130 | 6.2 | 14 | **40** | <5.0 | <0.020 |
| 17760-WSW1 | 3/23/2010 | Not sampled - Out of Service | | | | | | | |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | Not sampled - Out of Service | | | | | | | |
| | 10/8/2015 | Not sampled | | | | | | | |
| | 7/28/2016 | Not sampled - Out of Service | | | | | | | |
| | 7/13/2017 | Not sampled - Out of Service | | | | | | | |
| 17760-WSW2 | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 10/8/2015 | Not sampled | | | | | | | |
| | 7/28/2016 | Not sampled - Out of Service | | | | | | | |
| | 7/13/2017 | Could Not Find - Assumed Destroyed | | | | | | | |
| 17760-WSW3 | 3/23/2010 | <1.00 | <1.00 | <1.00 | <3.00 | 1.33 | <5.00 | -- | -- |
| | 10/18/2011 | <1.00 | <1.00 | <1.00 | <3.00 | 3.57 | <5.00 | -- | -- |
| | 5/1/2014 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 10/8/2015 | Not sampled | | | | | | | |
| | 7/28/2016 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| | 7/13/2017 | <0.050 | <0.050 | <0.050 | <0.050 | <0.050 | <0.050 | <0.050 | <0.020 |
| 17760-WSW3 (DUP) | 7/13/2017 | <0.050 | <0.050 | <0.050 | <0.050 | <0.050 | <0.050 | <0.050 | <0.019 |
| 17760-WSW-4 | 3/23/2010 | Not sampled - Out of Service | | | | | | | |
| | 10/18/2011 | Not sampled - Out of Service | | | | | | | |
| | 5/1/2014 | Not sampled - Out of Service | | | | | | | |
| | 10/8/2015 | Not sampled | | | | | | | |
| | 7/28/2016 | Not sampled - Out of Service | | | | | | | |
| | 7/13/2017 | Could Not Find | | | | | | | |
| 17760-FB-1 | 7/12/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-FB-2 | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.020 |
| 17760-TB-1 | 7/13/2017 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | -- |
| 17760-WSWFB-1 | 7/13/2017 | <0.050 | 0.31J | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.020 |
| 17760-WSWTB-1 | 7/13/2017 | <0.050 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | -- |

Notes:

ug/L = Micrograms per liter
RBSL = Risk-Based Screening Level
J = Estimated result
P = The RPD between two GC columns exceeds 40%
-- = Not Analyzed
MTBE = Methyl tertiary butyl ether
1,2-DCA = 1,2-Dichloroethane
EDB = 1,2-Dibromoethane
DUP = Duplicate Sample
FB = Field Blank
TB = Trip Blank
**Bold** lettering indicates parameter exceeds SCDHEC RBSL's except 1,2-DCA which is based on EPA limit

**TABLE 1B**
**GROUNDWATER LABORATORY DATA (OXYGENATES)**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC UST PERMIT #17760**
**TERRY PROJECT #2230.13**

| Well | Date | TAME | TBA | DIPE | ETBE | ETBA | Ethanol | TAA | TBF |
|---|---|---|---|---|---|---|---|---|---|
| Units | -- | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| RBSL | -- | 128 | 1,400 | 150 | 47 | N/A | 10,000 | 240 | N/A |
| 17760-MW1 | 5/1/2014 | 150J | <1,000 | 50 | <50 | <1,000 | <5,000 | 1,500 | <250 |
| | 10/9/2015 | 78J | 120J | 23 | <20 | <400 | <2,000 | 870 | <100 |
| | 7/28/2016 | 88J | <1,000 | <50 | <50 | <1,000 | <5,000 | 1,100 | <250 |
| | 7/13/2017 | 73J | 130J | 23 | <10 | <200 | <1,000 | 1,300 | <50 |
| 17760-MW2 | 5/1/2014 | 68J | 530 | <10 | <10 | <200 | <1,000 | 250 | <50 |
| | 10/9/2015 | 82J | 660 | <10 | <10 | <200 | <1,000 | 330 | <50 |
| | 7/28/2016 | 56J | 560 | <20 | <20 | <400 | <2,000 | 290J | <100 |
| | 7/13/2017 | 93J | 1,100 | <20 | <20 | <400 | <2,000 | 580 | <100 |
| 17760-MW3 | 5/1/2014 | Free Product (0.27 ft) | | | | | | | |
| | 10/9/2015 | Free Product (0.04 ft) | | | | | | | |
| | 7/28/2016 | <1,000 | <2,000 | <100 | <100 | <2,000 | <10,000 | 3,100 | <500 |
| | 7/13/2017 | <1,000 | <2,000 | <100 | <100 | <2,000 | <10,000 | 1,900J | <500 |
| 17760-MW3 (DUP) | 7/13/2017 | <1,000 | <2,000 | <100 | <100 | <2,000 | <10,000 | 1,800J | <500 |
| 17760-MW4 | 5/1/2014 | Could Not Find | | | | | | | |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW5 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | 0.51J | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW6 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW7 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/9/2015 | Could Not Find | | | | | | | |
| | 7/13/2017 | Could Not Find | | | | | | | |
| 17760-MW9 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW10 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW11 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW12 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |

**TABLE 1B**
**GROUNDWATER LABORATORY DATA (OXYGENATES)**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC UST PERMIT #17760**
**TERRY PROJECT #2230.13**

| Well | Date | TAME | TBA | DIPE | ETBE | ETBA | Ethanol | TAA | TBF |
|---|---|---|---|---|---|---|---|---|---|
| Units | -- | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| RBSL | -- | 128 | 1,400 | 150 | 47 | N/A | 10,000 | 240 | N/A |
| 17760-MW13 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/9/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW14 | 5/1/2014 | Could Not Find | | | | | | | |
| | 10/9/2015 | Destroyed | | | | | | | |
| 17760-MW15 | 5/1/2014 | Could Not Find | | | | | | | |
| | 10/9/2015 | Destroyed | | | | | | | |
| 17760-MW16 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/9/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW17 | 5/1/2014 | 7.6J | 92 | 13 | <1.0 | <20 | <100 | 110 | <5.0 |
| | 10/9/2015 | <10 | 4.0J | <1.0 | <1.0 | <20 | <100 | 12J | <5.0 |
| | 7/28/2016 | <10 | 13J | <1.0 | <1.0 | <20 | <100 | 11J | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW18 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/9/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | Abandoned | | | | | | | |
| 17760-MW19 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW20 | 5/1/2014 | 1.6J | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | 3.1J | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW21 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW22 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW23 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW24 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-MW25 | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |

**TABLE 1B**
**GROUNDWATER LABORATORY DATA (OXYGENATES)**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC UST PERMIT #17760**
**TERRY PROJECT #2230.13**

| Well | Date | TAME | TBA | DIPE | ETBE | ETBA | Ethanol | TAA | TBF |
|---|---|---|---|---|---|---|---|---|---|
| Units | -- | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| RBSL | -- | 128 | 1,400 | 150 | 47 | N/A | 10,000 | 240 | N/A |
| 17760-DW1 | 5/1/2014 | 23J | 520 | 19 | <10 | <200 | <1,000 | **670** | <50 |
| | 10/9/2015 | 14J | 590 | 22 | <10 | <200 | <1,000 | **650** | <50 |
| | 7/28/2016 | 17J | 720 | 21 | <5.0 | <100 | <500 | **780** | <25 |
| | 7/13/2017 | 8.6J | 200 | 12 | <1.0 | <20 | <100 | 170 | <5.0 |
| 17760-DW2 | 5/1/2014 | 8.5J | 300 | 9.3 | <1.0 | <20 | <100 | **410** | <5.0 |
| | 10/9/2015 | 8.0J | 280 | 7.1 | <1.0 | <20 | <100 | **320** | <5.0 |
| | 7/27/2016 | 8.8J | 330 | 11 | <1.0 | <20 | <100 | **360** | <5.0 |
| | 7/13/2017 | 8.1J | 460 | 13 | <5.0 | <100 | <500 | **490** | <25 |
| 17760-DW3 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/9/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-DW4 | 5/1/2014 | <10 | 7.1J | <1.0 | <1.0 | <20 | <100 | 33 | <5.0 |
| | 10/9/2015 | <10 | 4.9J | <1.0 | <1.0 | <20 | <100 | 24 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | 14J | <5.0 |
| 17760-DW5 | 5/1/2014 | 54J | <400 | <20 | <20 | <400 | <2,000 | 200J | <100 |
| | 10/8/2015 | 77 | 120 | 11 | <5.0 | <100 | <500 | **290** | <25 |
| | 7/28/2016 | 61 | 110 | 6.1 | <5.0 | <100 | <500 | 130 | <25 |
| | 7/12/2017 | 69 | 200 | 6.3 | <5.0 | <100 | <500 | 240 | <25 |
| 17760-DW6 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/9/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-DW7R | 5/1/2014 | 21J | 270 | 6.2 | <5.0 | <100 | <500 | **390** | <25 |
| | 10/9/2015 | 5.4J | 170 | 3.9 | <1.0 | <20 | <100 | 180 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | 2.5J | 120 | 2.3 | <1.0 | <20 | <100 | 130 | <5.0 |
| 17760-DW8 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-DW9 | 10/9/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-DW10 | 10/8/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | 86J | <20 | <5.0 |
| | 7/12/2017 | 0.48J | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-DW11 | 10/9/2015 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/27/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-DW12 | 10/9/2015 | 16 | 27 | 2.1 | <1.0 | <20 | <100 | 110 | <5.0 |
| | 7/28/2016 | 24 | 68 | 4.0 | <1.0 | <20 | <100 | 180 | <5.0 |
| | 7/13/2017 | 7.0J | 97 | 3.5 | <1.0 | <20 | <100 | 140 | <5.0 |
| 17760-DW12 (DUP) | 7/13/2017 | 7.3J | 100 | 3.4 | <1.0 | <20 | <100 | 140 | <5.0 |

**TABLE 1B**
**GROUNDWATER LABORATORY DATA (OXYGENATES)**
**HOT SPOT #2015**
**FLORENCE, SOUTH CAROLINA**
**SCDHEC UST PERMIT #17760**
**TERRY PROJECT #2230.13**

| Well | Date | TAME | TBA | DIPE | ETBE | ETBA | Ethanol | TAA | TBF |
|---|---|---|---|---|---|---|---|---|---|
| **Units** | -- | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| **RBSL** | -- | **128** | **1,400** | **150** | **47** | **N/A** | **10,000** | **240** | **N/A** |
| 17760-DW13 | 10/9/2015 | 4.4J | 340 | 12 | <1.0 | <20 | <100 | **330** | <5.0 |
| | 7/28/2016 | 6.9J | 670 | 26 | <1.0 | <20 | <100 | **710** | <5.0 |
| | 7/13/2017 | 4.7J | 640 | 22 | <5.0 | <100 | <500 | **630** | <25 |
| 17760-WSW1 | 5/1/2014 | Not Sampled - Out of Service | | | | | | | |
| | 10/8/2015 | Not Sampled | | | | | | | |
| | 7/28/2016 | Not Sampled - Out of Service | | | | | | | |
| | 7/13/2017 | Not Sampled - Out of Service | | | | | | | |
| 17760-WSW2 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | Not Sampled | | | | | | | |
| | 7/28/2016 | Not Sampled - Out of Service | | | | | | | |
| | 7/13/2017 | Could Not Find - Assumed Destroyed | | | | | | | |
| 17760-WSW3 | 5/1/2014 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 10/8/2015 | Not Sampled | | | | | | | |
| | 7/28/2016 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-WSW3 (DUP) | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-WSW4 | 5/1/2014 | Not Sampled - Out of Service | | | | | | | |
| | 10/8/2015 | Not Sampled | | | | | | | |
| | 7/28/2016 | Not Sampled - Out of Service | | | | | | | |
| | 7/13/2017 | Could Not Find | | | | | | | |
| 17760-FB-1 | 7/12/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-FB-2 | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-TB-1 | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |
| 17760-WSWFB-1 | 7/13/2017 | <10 | <20 | <1.0 | <1.0 | <20 | <100 | <20 | <5.0 |

**NOTES/KEY:**

RBSL = Risk-Based Screening Level
ug/L = micrograms per liter
J = Estimated result
DUP = Duplicate
FB = Field Blank
TB = Trip Blank
--=Not Tested
**Bold** lettering indicates parameter exceeds SCDHEC RBSL's

TAME = tert-Amyl methyl ether
TBA = tert-Butyl Alcohol or t-Butanol
DIPE = Isopropyl ether or diisopropyl Ether
ETBE = Ethyl tert-butyl ether
ETBA = 3,3-Dimethyl-1-butanol or ethyl tert-butanol
TAA = tert-Amyl alcohol
TBF = tert-Butyl formate

# APPENDIX C

## UIC Permit Application

| Form I UIC | D H E C<br>Underground Injection Control Permit Application<br>Ground-Water Protection Division<br>(Collected under the Authority of Title 48 Chapter 1 of the 1976 South Carolina Code of Laws) | I. EPA ID NUMBER<br>U | T/A | C |
|---|---|---|---|---|

Read attached instructions before starting.
For OfficialUse Only

| Application Approved month day year | Date Received month day year | Permit Well Number |
|---|---|---|
| | | |

Comments

| II. Facility Name and Address | III. Owner/Operator and Address |
|---|---|
| Facility Name: Former Hot Spot #2015 | Owner/OperatorName: Terry Environmental |
| Street Address: 4424 South Irby Street | Street Address: PO BOX 25 |
| City: Florence; State: SC; Zip Code: | City: Summerville; State: SC; Zip Code: 29484 |

**IV. Ownership Status (Select One)**

☐ A. Federal ☐ B. State ☒ C. Private
☐ D. Public ☐ E. Other (Explain)

**V. SIC Codes**

**VI. Well Status (Select A, B or C)**

☐ A. Operating | Date Started *(MM/DD/YYYY)* | ☐ B. Modification/Conversion ☒ C. Proposed

**VII. Type of Permit Requested - Class and Type of Well (see reverse)**

| A. Class(es) enter code(s) | B. Type(s) enter code(s) | C. If class is "other" or type is code 'Y', explain | D. Number of Wells per type |
|---|---|---|---|
| V.A | I | | 6 |

**VIII. Location of Wells or Approximate Center of field or Project**

| C | A. Latitude | | | | B. Longitude | | | |
|---|---|---|---|---|---|---|---|---|
| | | Deg | Min | Sec | | Deg | Min | Sec |
| 1 | | 34 | 06 | 05.97 | | 79 | 46 | 47.37 |

**IX. Attachments**

**Complete the following questions on a separate sheet(s) and number accordingly; see instructions for Classes II, III, and V, complete and submit on a separate sheet(s) attachments A-U as appropriate. Attach maps where required. List attachments by letter which are applicable and include with your application.**

**X. Certification**

**I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.**

| A. Name (Type or Print) | Title | B. Phone No. |
|---|---|---|
| Jason Terry | President | (843) 873-8200 |

C. Signature

D. Date Signed (MM/DD/YYYY) 10/16/2017

DHEC2502(08/1997)

**Attachment A** **Activity for Review**

TERRY Environmental Services, Inc. (TERRY) has prepared this Modification to the original Corrective Action Plan (CAP) to enhance the remediation process at the former Hot Spot #2015 gasoline station site in Florence, SC (currently the property is vacant). The following sections describe the modifications to the existing injection system that were implemented to remediate contaminants to the site-specific target levels.

The original Corrective Action Plan was prepared by a different contractor in July 2001, and called for the injection of ambient air via 26 Air Sparge wells constructed at the subject site. Upon approval of this CAP modification, TERRY will connect an oil-less air compressor to each well to inject unfiltered ambient air. The following sections describe pertinent information concerning requested modifications to the existing CAP.

## INJECTION WELLS

TERRY requests up to six (6) additional wells will be installed. Injection of ambient air will be performed directly into the injection well network. A detail of the Injection Well construction is shown on Figure I-2A. Typically, TERRY plans to install five feet of screen at least five feet below the groundwater level. The locations of the injection wells are shown on Figure 2. The site response to the injection of air will be evaluated throughout the remediation project and the need for adjustments will be monitored. Groundwater flow and changes in groundwater elevation will also be monitored to ensure that hydraulic control of the contaminant plume is maintained.

## SYSTEM LAYOUT

### Air Injection

TERRY will start the remediation project with the connection of an oil-less air compressor to each of the newly installed injection wells. This will allow for the injection of unfiltered ambient air. Operating pressures should not exceed 10 psi and a flow rate of around 8 cfm is expected in each well. Typically, pushing the water column down five feet requires less than 3 psi and pore entry pressures for clayey and silty substrates vary. The injected air will volatilize much of the dissolved contaminants of concern which will subsequently rise to the surface and be released into the atmosphere at deminus amounts.

Additionally, oxygen introduced to the subsurface will stimulate the growth and reproduction of the indigenous microorganisms and aid in the biodegration of remaining VOCs.

## OPERATING PARAMETERS

As previously mentioned, TERRY is requesting the injection of ambient air into a newly installed sparge well network. As such, it is expected that the injection pressure will remain below 10 pounds per square inch (psi) and the flow will be less than 8 cubic feet per minute (cfm). The actual flow rates and pressures will vary depending on the seasonal variations in the groundwater table elevation, formation entry pressure, and other factors.

## PERMITS

**Attachment B Well Construction Details**

The well construction details are attached. Up to six (6) injection wells may be installed. Construction material will be one-inch PVC Schedule 40 with five feet of screen and the top of the screen will be located at least five feet below the top of the water column. If site conditions warrant, TERRY may also inject air into some of the deeper wells onsite that have CoCs above their respective RBSLs. Operating pressures for deeper injections should not exceed 30 psi and 5 cfm.

**Attachment C Operating Data**

1) The maximum injection pressure is estimated to be 30 psi for air injections.

**Attachment D Monitoring Program**

1) Previous groundwater data will be used to establish the contaminant levels prior to the injection. Follow-up sampling events will be performed quarterly. Prior to sampling, the wells will be purged if needed and the field parameters pH, specific conductivity, temperature, and dissolved oxygen will be monitored. If purging is performed, a minimum of three well volumes will be purged and the field parameter readings will fall within a 10% variation before sample collection will be performed. Each monitoring well will be sampled using a clean, single-sample, disposable bailer. The collected samples will be decanted into sterile sample containers provided by the contract laboratory and the sample containers will then be placed into the sampling coolers. The samples will be chilled to approximately $4^0$

C using wet ice and prepared for shipment to the contract laboratory via overnight carrier. Upon receipt at the contract laboratory, the groundwater samples will be analyzed as follows:

**Summary of Analytical Methods**

| Parameter | USEPA Method | Reporting Limit |
|---|---|---|
| Benzene | 8260B | 1 ug/l |
| Toluene | 8260B | 1 ug/l |
| Ethylbenzene | 8260B | 1 ug/l |
| Xylenes | 8260B | 3 ug/l |
| MTBE | 8260B | 1 ug/l |
| Naphthalene | 8260B | 5 ug/l |
| 1,2 DCA | 8260B | 5 ug/l |
| Oxygenates: TAA | 8260-OXY | 20 ug/l |

All sampling activities will be performed according to established United States Environmental Protection Agency (USEPA) and SCDHEC protocol and the sampling activities will be documented on groundwater sampling logs.

2) The purpose of the injection is to remediate the contaminant levels in the aquifer.

3) Hydraulic control of the contaminant plume and ambient air will be verified by the above described monitoring and sampling and analyses for the parameters listed in Table 2.

## Attachment E Existing or Pending State/Federal Permits

There are no known existing federal permits for this site with regards to corrective actions.

The only known existing state permits are:

- SC Registered Underground Storage Tank, Site ID # 17760
- Underground Injection Control Permit # 570.

## Attachment F Description of Business

The property is currently vacant. The site topography is flat.

**Attachment G Area of Review**

See attached map.

**Attachment H – 1 Topographic Map indicating 1-mile radius**

No known hazardous waste treatment, storage, or disposal facilities within 1 mile of facility.

No known adjacent properties are impacted by soil or groundwater contamination other than the subject site.

See attached.

**Attachment H – 2**

There is a surface water body identified at the site is a drainage ditch which is often dry. Monitoring wells exist on the subject site and these wells are indicated on the site diagram figure.

See attached map.

**Attachment H – 3**

See attached maps.

**Attachment I – 1 Geologic Cross Sections**

See attached Well Log(s)

**Attachment I – 2**

The remediation system being modified at this site.

**Attachment J – Name and Depth of Underground Drinking Water Sources**

Depth of underground drinking water source unknown, but most likely much greater than 300 feet below ground surface. The only aquifer to be affected by the injection process will be the shallow water table aquifer.

**Attachment K - 1 – Hydraulic Control**

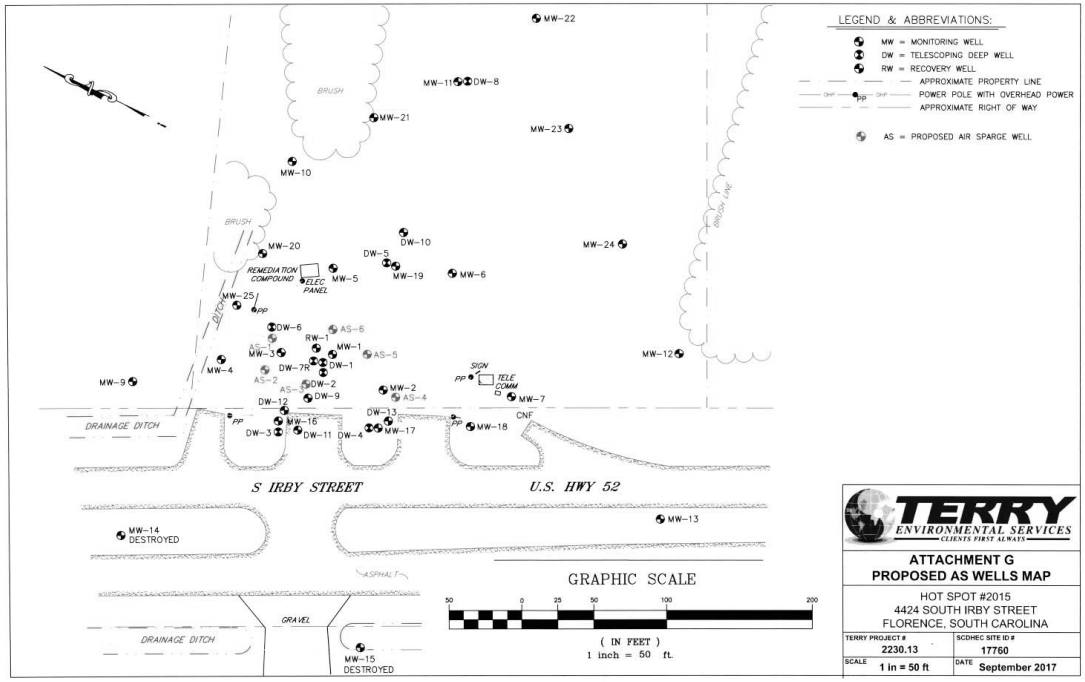
Not applicable.

**Attachment K – 2 Vertical Gradient**

The presence of a vertical gradient (negative or positive) at the site is unknown at this time, but if present it is most likely negligible.

# Attachment G

# Area of Review

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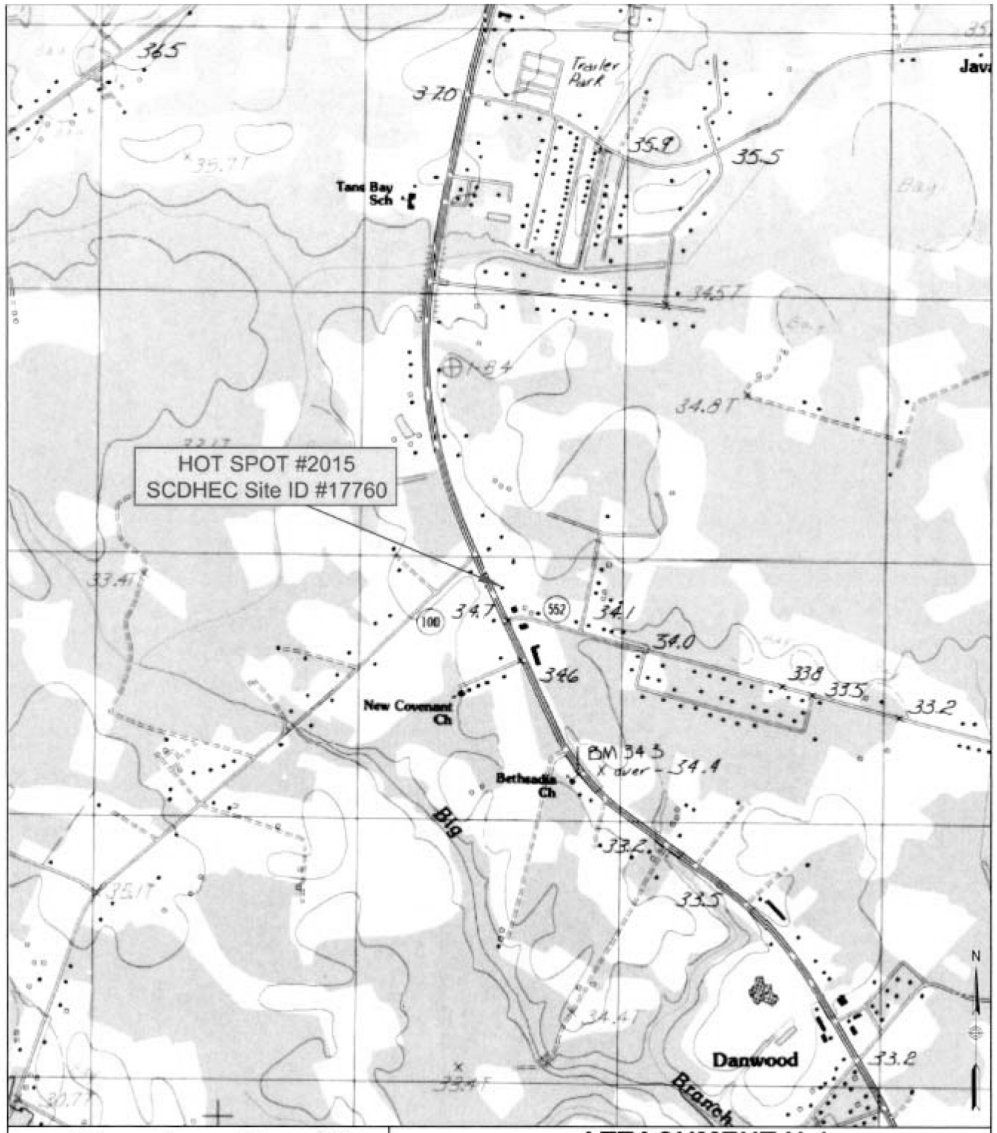
**ATTACHMENT G**
**PROPOSED AS WELLS MAP**

HOT SPOT #2015
4424 SOUTH IRBY STREET
FLORENCE, SOUTH CAROLINA

| TERRY PROJECT # | SCDHEC SITE ID # |
|---|---|
| 2230.13 | 17760 |
| SCALE: 1 in = 50 ft | DATE: September 2017 |

# Attachment H – 1

# Topographic Map




1,000 0 1,000 2,000
FEET

# ATTACHMENT H-1
# TOPOGRAPHIC MAP

HOT SPOT #2015
4424 South Irby Street
Florence, South Carolina
SCDHEC Site ID #17760

TERRY ENVIRONMENTAL SERVICES
CLIENTS FIRST ALWAYS

...providing our clients with the best services available, actually understanding our clients objectives and making their objectives our own!

PO Box 25
Summerville, South Carolina 29484
(800) 325-0605 (843) 873-8200 fax (843) 873-8765

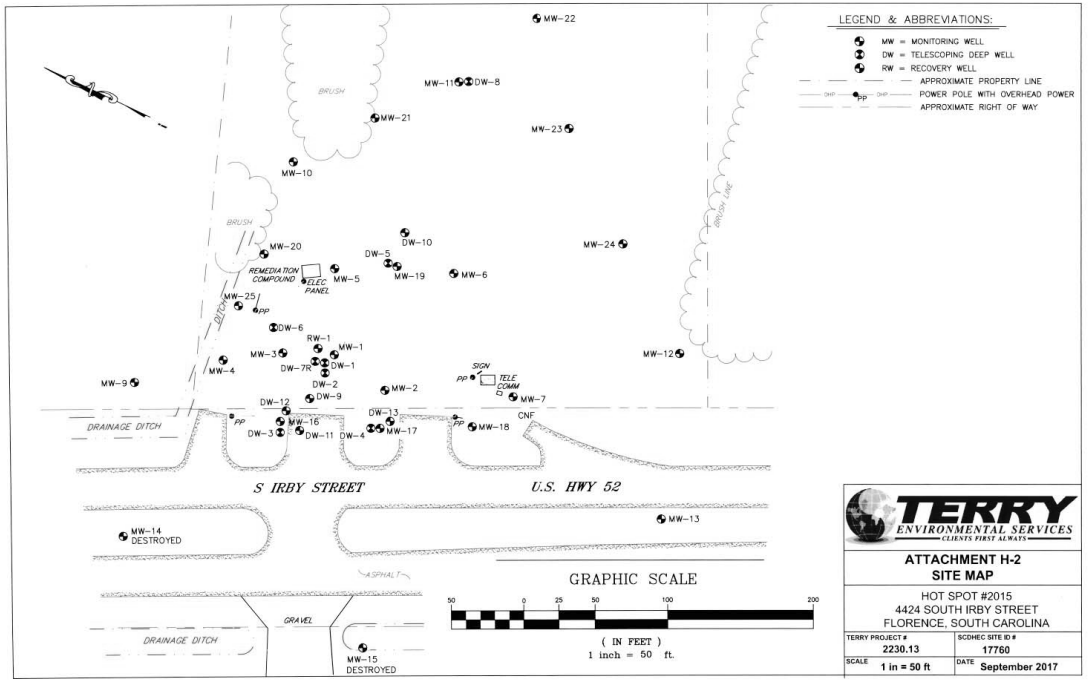
| SIZE | TERRY Project No. | DWG NO. | REV |
|---|---|---|---|
| B | 2230.13 | Figure 1 Topographic Map.dwg | |

SCALE: As Shown

DATE: September 2017

# Attachment H – 2

# Site Base Map

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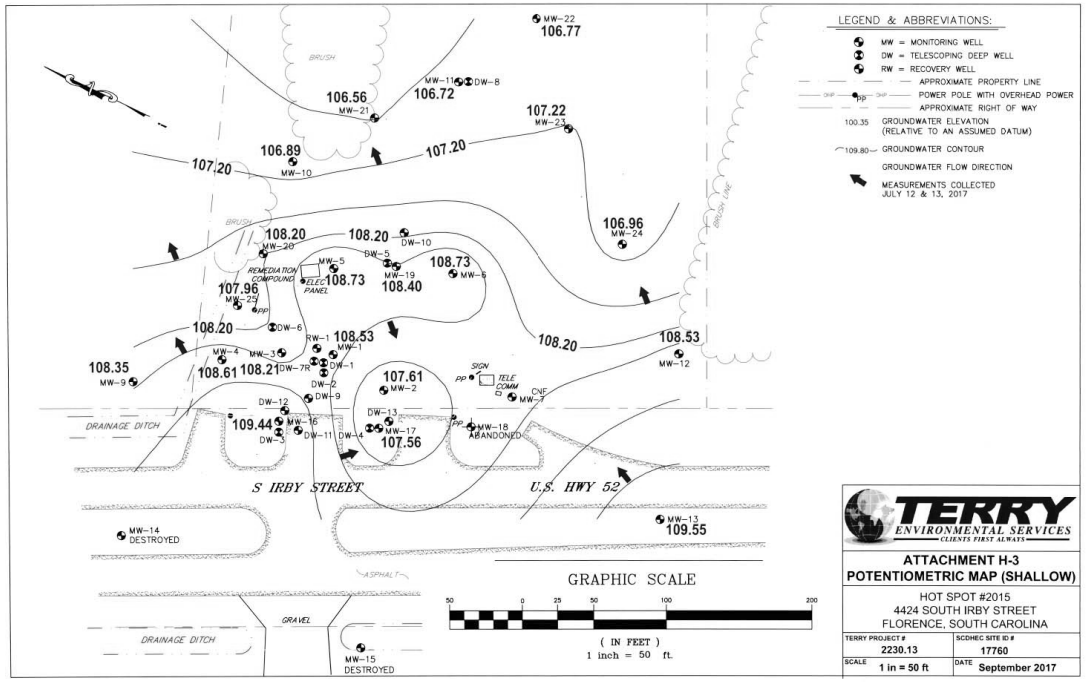
**ATTACHMENT H-2**
**SITE MAP**

HOT SPOT #2015
4424 SOUTH IRBY STREET
FLORENCE, SOUTH CAROLINA

| TERRY PROJECT # | SCDHEC SITE ID # |
|---|---|
| 2230.13 | 17760 |
| SCALE: 1 in = 50 ft | DATE: September 2017 |

# Attachment H – 3

# Site Potentiometric Map

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**ATTACHMENT H-3**
**POTENTIOMETRIC MAP (SHALLOW)**

HOT SPOT #2015
4424 SOUTH IRBY STREET
FLORENCE, SOUTH CAROLINA

| TERRY PROJECT # | SCDHEC SITE ID # |
|---|---|
| 2230.13 | 17760 |
| SCALE: 1 in = 50 ft | DATE: September 2017 |

# Attachment I – 1

# Geologic Cross Sections and/or Well Logs

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# WELL LOG

MONITORING WELL #: DW-2
TERRY PROJECT: Hot Spot #2015
PROJECT LOCATION: Florence, SC

TERRY PROJECT #: 2230.17
SCDHEC SITE ID #: 17760
CLIENT: R. L. Jordan Oil Company
FIELD PERSONNEL: A. Oteri
START DATE: 5/1/08 FINISH DATE: 5/2/08
DRILLING COMPANY: Geologic Exploration Inc.
DRILLER: Brian Thomas (Cert. #01465B)
DRILLING METHOD: Mud Rotary/HSA

HOLE DIAMETER: 8.25"
CASING DIAMETER: 2" AND 6"
SCREEN DIAMETER: 2"
TOP OF CASING ELEVATION: 0
WATER LEVEL: 28.0 ft. b.g.s.
EASTING: 0
NORTHING: 0
DEVELOPMENT: Pumping & Surging

Casing Interval 0-40 FT BGS Bentonite Interval 38-48 FT BGS Filter Interval 48 to 55 ft.
Screen Interval 50-55 FT BGS Grout Interval 0-38 FT BGS Filter Material Sand

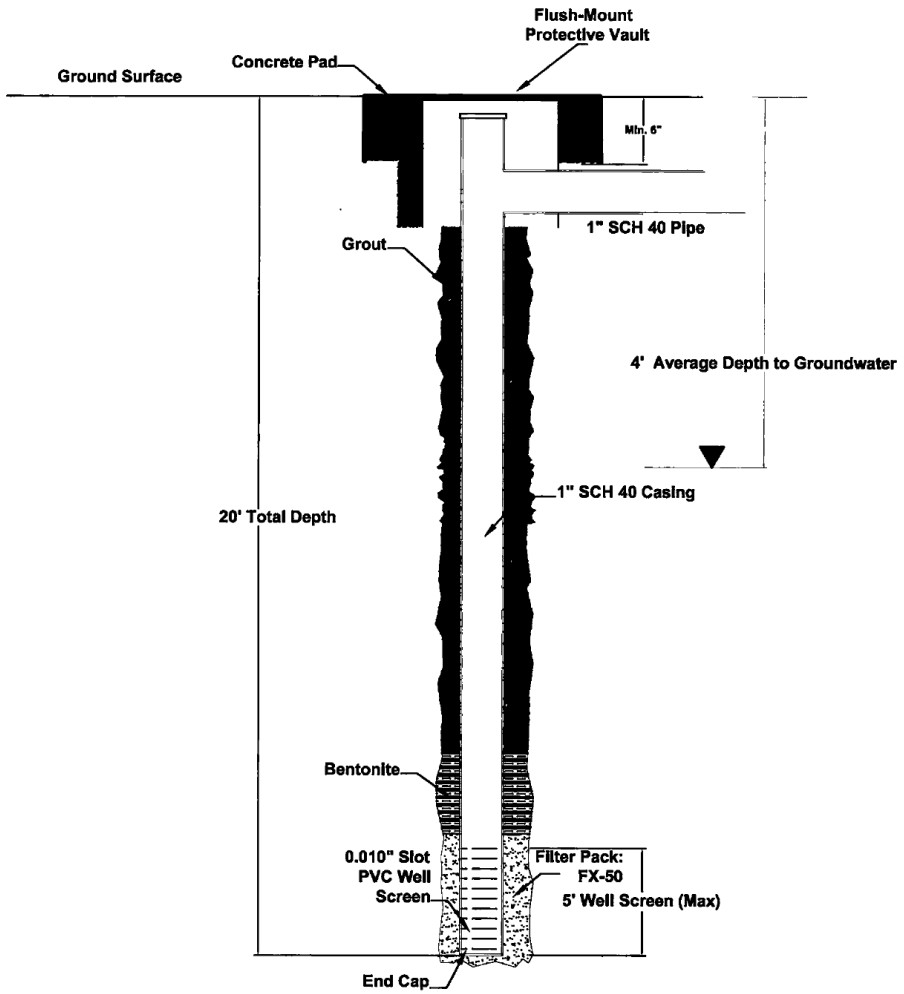
| Depth Scale | Sample Zone | Odor 1=none 2=slight 3=strong | OVA Reading | Moisture 1=dry 2=moist 3=wet | Lithology | Water Level | Well Construction |
|---|---|---|---|---|---|---|---|
| 0 | 1 | N/A | 2 | | SANDY CLAY: Dark gray sandy clay, moist, strong petroleum odor. | | WELLCAP |
| 5 | 3 | N/A | 3 | | SANDY CLAY: Dark gray sandy clay, wet, strong petroleum odor. | | |
| 10 | 3 | N/A | 3 | | CLAY: Light gray/white clay, wet, strong petroleum odor. | | SCH 40 PVC OUTER CASING |
| 15 | 3 | N/A | 3 | | SANDY CLAY: Medium gray sandy clay, moist, strong petroleum odor. | | GROUTED ANNULUS |
| 20 | 3 | N/A | 3 | | SAND: Medium gray coarse sand, wet, strong petroleum odor. | | SCH 40 PVC INNER CASING |
| 25 | 3 | N/A | 3 | | SANDY CLAY: Medium gray sandy clay, moist, moderate petroleum odor. | | |
| 30 | 1 | N/A | 3 | | | | |
| 35 | 1 | N/A | 3 | | CLAY: Dark gray clay, moist, moderate petroleum odor. | | |
| 40 | 1 | N/A | 2 | | LIMESTONE: Gray limestone with some shells. | | BENTONITE |
| 45 | 1 | N/A | 2 | | | | |
| 50 | 1 | N/A | 1 | | | | GRAVEL PACK SCH 40 WELLSCREEN |
| 55 | | | | | | | |

Total Depth = 55 FT BGS

# Attachment I – 2A & 2B

# Air Sparge Well and Compressor/Piping

WELL CONSTRUCTION DETAIL

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PO Box 25
Summerville, South Carolina 29484
(800) 325-0605 (843) 873-8200 fax (843)-873-8765

# ATTACHMENT I-2A
# INJECTION WELL CONSTRUCTION DETAIL

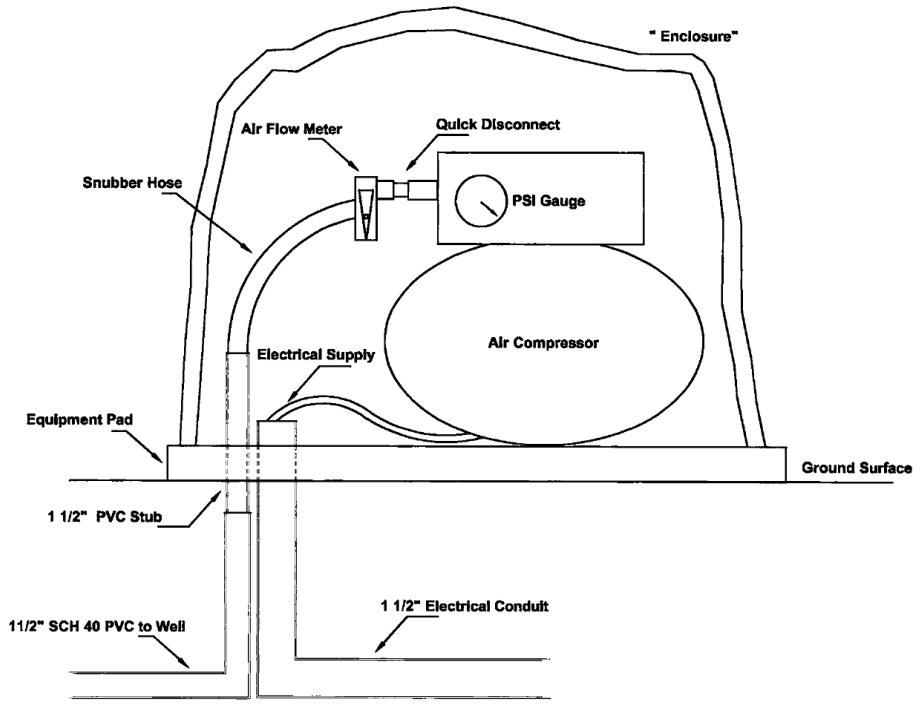
Former HOT SPOT #2015
4424 South Irby Street
Florence, South Carolina
SCDHEC UST Permit # 17760

| SIZE | TERRY Project No. | DWG NO. | REV |
|---|---|---|---|
| B | 2230.13 | 4 | |

SCALE: NOT TO SCALE

DATE: September 2017

AIR COMPRESSOR DETAIL

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# ATTACHMENT I-2B
# AIR COMPRESSOR & PIPING

Former HOT SPOT #2015
4424 South Irby Street
Florence, South Carolina
SCDHEC UST Permit # 17760

| SIZE | TERRY Project No. | DWG NO. | REV |
|---|---|---|---|
| B | 2230.13 | 6 | |

SCALE: NOT TO SCALE

DATE: September 2017